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July 28, 2003, 03:59:28; Search time 20.3193 Seconds (without alignments) 609.878 Million cell updates/sec
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1 MARLQTALLVVLVLLAVALQ......EICADPRVPWVKMILNKLSQ
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                908470 seqs, 133250620 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                          OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Perfect score:
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1991\_DAT:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

 Description	Macrophage derived Amino acid sequenc Human chemokine pr Macrophage-derived Human macrophage d Human macrophage d Amorophage d Macrophage derived A human macrophage-d
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SUMMARIES	AAW20058 AAW62783 AAW50811 AAW40811 AAY2414 AAY05871 AAY05829 AAB07500 AAB07500
	20 20 20 21 21 23
% Query Match Length DB	
% Query Match	1000.000.000.000.000.000.000.000.000.00
Score	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
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6 +0+	,	n (	10	g	chemo
3 484 9	ъ.	60	22	AAB68352	Amino acid sequenc
4 480 9	œ	6	20	AAY05879	Human macrophage-d
5 463 9	4	93	20	AAY05880	Macaque macrophage
6 457 9	e,	98	19	AAW59432	Human chemokine pr
7 445 9	ä	93	18	AAW20059	macrophage
8 445 9	ä	66	20	AAY24417	phage derive
9 445.9	Ξ.	93	20	AAY05872	Human macrophage-d
0 386 7	ω.	69	23	AA020022	
1 386 7	æ	69	23	AA014155	MDC profe
2 386 7	æ	7.0	8	AAW20060	
3 386 7	æ	70	20	AAY24413	hade derive
1 386 7	æ	7.0	20	AAY05873	Human manufactured
25 386 7	œ	154	20	AAY05878	Yeast pre-pro-alph
5 386 7	æ	$\sim$	20	AAY29895	
7 386 7	æ,	334	20	AAY29904	MDC and
3 386 7	œ.	œ	20	AAY29900	MDC and
380 7	7	89	18	AAW17668	ell mobi
374 7	Ġ.	69	18.	. AAW20061	
1 374 7	Ġ.	69	20	AAY24415	hage derive
374 7	'n	69	20	AAY05874	Human macrophage-d
3 362 7	ψ.	69	18	AAW20062	Human macrophage d
1 362 7	_:	69	. 50	AAY24416	hage derive
5 362 7		69	20	AAY05875	Human macrophage-d
336 6	m.	473	22	AAB61797	Chimeric chemokine
334 6	œ.	92	19	AAW59434	Mouse chemokine pr
3 332 6	ζ.	92	20	AAY05876	macrophage
3 309 6	ĸ.	81	20	AAY05877	Rat macrophage-der
268 5	٠.	. 89	22	AAB61808	Murine MDC mature
1 268 5		9	23	AAG78392	Mouse chemokine mM
2 268 5	_:	9	23	AAG68355	Murine chemokine m
214.5 4	Ψ.	67	23	AAG78396	-
4 214.5 4	ĸ.	29	. 23	AAG68359	Chimeric chemokine
213 4	÷	37	22.	ABB39053	Peptide #6559 enco
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XX		
AC	AAW20058;	
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텀	11-SEP-1997	(first entry),
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DE	Macrophage de	Macrophage derived chemokine for treating inflammation.
××		
KW	MDC; macropha	ige derived chemokine; C-C; Cvs-Cvs; Crohn's disease;
KW	rheumatoid an	rheumatoid arthritis; chemotaxis; fibroblast proliferation:
KW	wound healing	wound healing; angiogenesis; inflammation.
XX		
SO	Homo sapiens.	
XX	-	
FH	Key	Location/Oualifiers
F	Peptide	124
FT		/label= sig peptide
FT	Protein	2593
FT		/label- mat_protein
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PN	WO9640923-A1.	
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PD	19-DEC-1996.	
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PF	07-JUN-1996;	96WO-US10114.
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PR	16-NOV-1995;	9505-0558658.
PR.	07-JUN-1995;	95US-0479620.
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96US-0025724
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N-PSDB; AAV34997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection; inhibitory compound; assay; reduce; circulatory system STCP-1 level; joint inflammation; rheumatoid arthritis; lupus.
                                                                                                                                                                                                                                             A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing, and treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
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                                                                                                               Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat Crohn's disease, rheumatoid arthritis, etc.
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                                                                                                                                                                                                       Claim 1; Page 73; 106pp; English.
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N-PSDB; AAV38933.
                                          WPI; 1997-052324/05.
N-PSDB; AAT76529.
  Gray PW;
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    Godiska R,
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The present sequence represents human STCP-1. STCP-1 polypeptides demonstrate chemokine activity for T-cells. The polypeptides are useful prophylactically or therapeutically to treat HIV infection and other conditions associated with viral/bacterial pathogens infecting T-cells, macrophages or other immune system cells. They can be included corrigionally chemically modified) with a pharmaceutically acceptable carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.) in therapeutic compositions for treating these conditions. STCP-1 also system STCP-1 levels to alleviate e.g. joint inflammation associated with rheumatoid arthritis, lupus or other autoimmune diseases. The nucleic acids are also useful to prepare antibodies or hybridomas. The nucleic acids are useful to propare antibodies or hybridomas. The nucleic acids are useful to produce hybridisation probes to test for STCP-1 DNA/RNA in mammalian samples.
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/label- signal
25.93
/label- 331D5
/note- "chemokine protein"
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Claim 1; Fig 2A-F; 96pp; English.
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29-SEP-1999
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                                                    Sequence
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                                                 Nucleic acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be used in diagnostics. The chemokines themselves are useful for treatment of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by the inventive
                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                           Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy; arthritis; inflammatory disorder; cancer; Crohn's disease;
                                                                                                                                                                                                                           1 MARLQTALLUVLVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antibodies specific for macrophage-derived chemokine - useful for purifying or detecting the chemokine or modulating its activity
                                      This sequence represents a novel human chemokine protein, 331D5
                                                                                                                                                                                                  ;
                                                                                                                                                                       Length 93;
                                                                                                                                                                                                  Indels
                                                                                                                                                                     Score 489; DB 19;
Pred. No. 2.6e-51;
Mismatches 0;
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                                                                                                                                                                                                                                                                                               "mature protein"
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           Page 78; 82pp; English.
                                                                                                                                                                     100.0%;
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25..93
/note=
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                                                                                                                                                                                     Sest Local Similarity
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                                                                                                                                             93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAT99233
                                                                                                                     composítions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JUN-1995;
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            Claim 1;
                                                                                                                                              Sequence
                                                                                                                                                                       Query Match
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isolating non-human MDC homologues. The MDC protein is potentially useful
                                                                                                                                                                                                                                                                                                                                      09
                                                                                                                                                                                                                                                                                                                                                                             1 MAREQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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                            for treating inflammatory disorders, cancer, etc. Antagonists of MDC can be used for treating Crohn's disease, arthritis, atherosclerosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               isolated by PCR, and administered by constructing an expression plasmid vector which can be expressed in a coordinated manner upon introduction in a suitable cell. The vacçines are immunostimulatory and can be used to treat microbial diseases especially HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Macrophage-derived chemokine; MDC; vaccine; immune response; antigen; humoral response; cell-mediated response; PCR; immunostimulatory; expression plasmid vector.
                                                                                                                                                                                                                                                                                                                                      1 MARIQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
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                                                                                                                                                                                               Length 93;
                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                               100.0%; Score 489; DB 19;
100.0%; Pred. No. 2.6e-51;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 6; Fig 1A(1)-1A(2); 134pp; English.
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/note= "signal peptide"
25..93
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                                                                                                                                                                                                                                                           93; Conservative
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                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                               93 AA;
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Conservative
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26-SEP-1997;
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93;
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                                                                                                                                                                                                                                                                           AAY05871;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          vaccine
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                                                                                                                            with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, arthritis and pulmonary fibrosis. The present sequence represents human
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
                                                                                                         1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotraxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated
                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                                     Length 93;
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                                                                       Indels
                                   Score 489; DB 20;
Pred. No. 2.6e-51;
; Mismatches 0;
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Pred. No. 2.6e-51;
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                                                                                                                                                                                                  61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                     Human macrophage derived chemokine.
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/label= signal
25..93
/label= MDC
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                                   100.0%;
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100.0%;
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95US-0479620.
95US-0558658.
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                                                                       Conservative
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N-PSDB; AAX90162.
                                                    Local Similarity
les 93; Conserv
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93 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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 Sequence
                                 Query Match
Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide
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                                                                       Matches
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Best Local Similarity

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               1 HARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
1 MARLQTALLUVLVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vertebrate Macrophage Derived Chemokines, analogues and antagonists
                                                                                                                                                                                                                                                                                                                    MDC; macrophage derived chemokine; C-C chemokine; human; antigonisticities dermatological; antigonisticities dermatological; immunosuppressive; antifinitammatory; antiasthmatic; antiagregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gray PW, Raport CJ;
                                                                 93
                                                                                  Human macrophage-derived C-C chemokine MDC.
                                                                  61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note- "signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Godiska R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 124; 147pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
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                                                                                                                                                                                     AAY05871 standard; Protein; 93
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97US-0939107
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The specification described a method of modulating the trafficking of systemic memory T cells in the method of modulating of comprises administering a CCR4 modulating agent. It has been found that systemic administering a CCR4 modulating agent. It has been found that systemic T cells such as express high levels of CCR4. Ligands of CCR4 such as TARC (thymus and activation regulated chemokine) and MDC (monokine derived chemokine) act as an adhesion trigger and, upon CCR4 binding, these cells undergo integrin dependent arrest to the appropriate vascular receptors. This arrest acts to localize the cells at the chemotaxis to affect the localization of T cells in targeted tissues. The active agent may be a CCR4 agonist that acts to enhance T cell localization. Alternatively, it may be an antagonist that blocks CCR4 biological activity. A CCR4 atagonist may be administered for the treatment of inflammation. The present sequence represents a human MDC.
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                                            1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Modulating the trafficking of systemic memory T cells in mammals by administering a CCR4 modulating agent, useful for the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                thymus and activation-regulated chemokine; vascular receptor; MDC; monokine derived chemokine; adhesion trigger; inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                              Systemic memory T cell; CCR4; TARC; integrin dependent arrest;
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Pred. No. 2.6e-51;
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                                                                                                                                          61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                      61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                          A human monokine derived chemokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 38; 39pp: English.
                                                                                                                                                                                                                                                         AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93; Conservative
      Conservative
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Best Local Similarity
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    93;
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        Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This represents a human macrophage derived chemokine (MDC). The invention provides a novel method of treating or preventing lentivirus (LV) infection or replication in a human subject, that comprises administering to the subject a composition comprising MDC or a derivative of MDC, or a nucleic acid encoding MDC or a derivative of MDC. The products can be used for treating or preventing LV infection or replication, particularly HIV infection or replication. The products can also be used for the prognosis for a LV infection, particularly an HIV infection using the MDC as a prognostic indicator. The methods can also be used with other LV9, e.g. simian immunodeficiency virus, feline immunodeficiency virus and bovine immunodeficiency virus.
                                                                                  9
                                                                                                    1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                Macrophage derived chemokine; MDC; lentivirus infection; human; HIV; human immunodeficiency virus; feline immunodeficiency virus; bovine immunodeficiency virus.
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Treatment or prevention of lentivirus, particularly HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "N-terminal fragment specifically claimed for in claim 18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "N-terminal fragment specifically claimed for in claim 19"
                                            .;
0
  Length 93;
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                                            Indels
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Pred. No. 2.6e-51;
      DB 20;
Score 489; DB 20;
Pred. No. 2.6e-51;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                              Macrophage derived chemokine (MDC) encoding DNA.
                                                                                                                                                                               61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                          61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Garzino-Demo A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 16; Page 97-98; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                           AAY06829 standard; Protein; 93 AA
                                          ;
0
  100.0%;
100.0%;
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                        93; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27..45
/note=
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/note=
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N-PSDB; AAX32817.
                        Best Local Similarity
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(ALKU ) AKZO

Device AL,

Sequence

Query Match

W09914237-A1

25-MAR-1999

16-SEP-1998; 16-SEP-1997;

Homo sapiens

Peptide

Peptide

25-JUN-1999

AAY06829;

RESULT 8 AAY06829

Wed

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The present sequence represents a novel human macrophage-derived C-C chemokine (MDC) of the invention. Chemokines comprise a family of small secreted proteins which attract and activate leukocytes, thereby aiding in the stimulation and regulation of the immune system. C-C cytokines are chemotranis. The invention comprises a novel human MDC protein and nucleic chemotranis. The invention comprises a novel human MDC protein and nucleic acids, as well as methods for the production of the MDC protein. The MDC infection, inflammation, and other sites having C-C chemokine receptor molecules. Inhibition of MDC is believed to be useful in treating diseases involving macrophages (e.g. Crohn's disease, rheumatoid architis or atherosclerosis). Alternatively, augmenting the effects of MDC is believed to be beneficial towards wound healing and anglogenesis. Also MDC or MDC agonists may be beneficial to patients receiving chemotherapy or radiation therapy and in the treatment of tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                ^{1s}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Macrophage derived C-C chemokines useful in medical imaging and for the development of agents for controlling inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                           note= "Mature macrophage-derived C-C chemokine, this
specifically claimed region"
                                                                                                                                                                                                                                                                    infection; inflammation; macrophage; Crohn's disease; rheumatoid arthritis; atherosclerosis; wound healing; angiogenesis;
                                                                                                                                                                                                                                     macrophage-derived C-C chemokine; MDC; immune system; yte; monocyte; calcium flux; chemotaxis; medical imaging;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            25. 39 //note= "Specifically claimed region"
                Human macrophage-derived C-C chemokine (MDC)
 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                     chemotherapy; radiation therapy; tumour
                                                                                                                                                                                                                                                                                                                                                                                              /note- "Signal peptide"
                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                          AA014046 standard; Protein; 93 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95US-0479603
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                                                                                                                                                                        (first entry)
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/note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-074410/10.
N-PSDB; AAK98372.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1995;
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                                                                                                                                                                       08-MAY-2002
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                                                                                                                                                                                                                                                       .eukocyte;
                           19
                                                                                                                                         AA014046;
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61
                                                                                                                                                                                                                                                                                                                                                                                 Peptide
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                                                                           RESULT 10
                                                                                           AA014046
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Length 93;

Score 489; DB 23; Pred. No. 2.6e-51;

100.0%;

Query Match Best Local Similarity

-5

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AAW07604 shows human chemokine beta-13 (Ck-beta-13), a member of the C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13 stimulates the invasion and activation of host defence cells making it useful for treating solid tumours, e.g. Kaposi's sarcoma, and for chemokine to acute and chronic infections, e.g. mycobacterial chections. The chemokine induces chemotactic migration of monocytes, neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to sites where they are needed. Bosinophils may be attracted to the site of a parasitic infection to kill parasite larvae. Ck-beta-13 also recruits debris-clearing and connective tissue promoting inflammatory calls, and is therefore used to stimulate wound healing, prevent scarring and treat liver cirrhosis, osteoarthritis and pulmonary fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell mediated autoimmune diseases, psoriasis, to regulate haematopolesis and to inhibit anglogenesis. Ck-beta-13 antagonists inhibit activity of the
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                                    1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                    1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                              defence; activation; eosinophi; monocyte; macrophage; T lymphocyte; T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection; Raposi's sarcoma; olrhosis; osteoarthritis; pulmonary fibrosis; lebkaemia; autoimmune disease; psoriasis; inflammation; allergy; rheumatoid arthritis; silicosis.
   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "given as encoded by CAC codon in AAT44026"
                                                                                                                                                                                                                                                                                                                                  Cytokine beta-13 stimulates migration/activation of immune cells.
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                                                                                                                                                                                                                                                                                                                                                                 Chemokine beta 13; Ck-beta-13; C-C; Cys-Cys subfamily; immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human chemokine beta-13 - useful for treating solid tumours, leukaemia, infections, autoimmune disease, fibrotic disorders, psoriasis, etc.
 Indels
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                                                                                                      93
                                                                                                                       Mismatches
                                                                                                      61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
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                                                                                                                                                                                                                             AAW07604 standard; Protein; 93
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                                                                                                                                                                                                                                                                                                  (first entry)
   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference 45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36-JUN-1995;
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93;
                                                                                                                                                                                                                                                                                                  03-SEP-1997
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                                                                                                                                                                                                                                                              AAW07604;
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   Matches
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intographone in the polypeptide and nucleic acid are useful in diagnosis invention: The polypeptide and nucleic acid are useful in diagnosis and treatment of immune system-related disorders in mammals (preferably humans). Such disorders include tumours, cancers, interstitial ung disease and disorders include tumours, cancers, interstitial lung disease and disorders include tumours, cancers, interstitial ung mammals with nancer of immune system express enhanced/decreased levels of CKbeta-13 and mmune system express enhanced/decreased levels of CKbeta-13 and mnune system expression and comparing to achieved by assaying CKbeta-13 gene expression and comparing to achieved by assaying CKbeta-13 gene expression and comparing to pharmaceutical compositions e.g. to treat immune system-related disorders as above, treat sepsis, inhibit bone marrow stem cell colony formation during cancer therapy, regulate haematopoiesis, stimulate wound healing etc. Compositions comprising the polymorleatides may also be administered, especially to express CKbeta-13 polypeptide in hosts to creat dysfunctions associated with aberrant endogenous CKbeta-13.
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                                                                                                                                                                                                 1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis; autoimmune disease; bone marrow stem cell colony formation inhibitor; haematopoiesis regulator; therapy.
  atherosclerosis, chronic inflammatory and infective diseases, allergic reactions, rheumatoid arthritis, silicosis and bone marrow failure.
                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chemokine beta-13; human; CKbeta-13; immune system-related disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human chemokine beta-13 polypeptide - useful in diagnosis and treatment of immune-system related disorders e.g. cancer of the immune system, leukaemias, autoimmune diseases etc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This sequence is the human chemokine beta-13 (CKbeta-13) of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       activity. The polynucleotides are also useful for mapping of
                                                                                              Score 484; DB 18; Length 93;
Pred. No. 1e-50;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                               93
                                                                                                                                                                                                                                                          PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                             61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                              AAW57881 standard; Protein; 93 AA
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                                                                                                99.0%;
98.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                              Query Match 99.0
Best Local Similarity 98.9
Matches 92; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human chemokine beta-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-333327/29.
                                                         93 AA;
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                                                           Sequence
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chromosomes/chromosome sites. The polypeptides are useful to screen for agonists and antagonists of CKbeta-13 activity. The antibodies are useful diagnostically or therapeutically e.g. as antagonists to treat subjects requiring CKbeta-13 reduction.
                                                                                                                                                                                                        1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chemokine beta-13; CKbeta-13; Addison's disease; haemolytic anaemia; rheumatic arthritis; dermatitis; allergic encephalomyelitis; glomerulomephritis; Goodpasture's Syndrome, Grave's Disease; multiple sclerosis; allergic reaction; asthma; anaphylaxis; hypersensitivity; blood group incompatibility; organ rejection; graft vs host disease; inflammatory disorder; septic shock; infectious diseases; immune system relative disorder; leukemia; wound healing; inflammatory bowel disease; cancer; psoriasis; bone marrow failure; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel human chemokine beta-13 polypeptides useful for treating autoimmune diseases, inflammatory diseases, infectious diseases, allergic conditions, hypervascular diseases, tumors and for wound
                                                                                                                                                      ö
                                                                                                                     Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amino acid sequence of human chemokine beta-13 polypeptide.
                                                                                                                       Score 484; DB 19;
Pred. No. 1e-50;
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                                                                                                                                                                                                                                                          63
                                                                                                                                                                                                                                                                          61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                                                        Mismatches
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(BGHM ) BRIGHAM & WOMENS HOSPITAL INC.
(SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                               AAB68352 standard; Protein; 93 AA
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                                                                                                                       99.08;
98.98;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0432768
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-JUL-2001 (first entry)
                                                                                                                                      Best Local Similarity 98.9
Matches 92; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-316379/33.
N-PSDB; AAF85169.
                                                                                       AA;
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                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                 AAB68352;
                                                                                                                       Query Match
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         hypersensituity, blood group incompatibility, organ rejection, graft vs host disease, inflammatory disorders including septic shock, sepsis or systemmic inflammatory response syndrome, infectious diseases, immune system relative disorders including leukemia, wound healing, acute and chronic infection and inflammatory bowel disease, cancers, psoriasis, hypervascular diseases, hyperproliferative disorders, atherosclerosis and bone marrow failure. They are also useful for modulating haemostatic or thrombolytic activity, for dispnosing infectious agents, modulate inflammation, inhibit bone marrow stem cells, colony formation, inhibit proliferation of haematopoietic cells, inhibit
                                                                                                                                                                                                                                                                                                                                                               1 MARLQTALLUVLVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                               epidermal keratinocyte proliferation, as anti-neovascularisation agent, enhance host defences, inhibit T-cell proliferation, prevent scarring during wound healing, increasing essinophils, mobilize bone marrow stem cells, inhibit cell growth and inhibit chemotaxis and activation of
                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vertebrate Macrophage Derived Chemokines, analogues and antagonists
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antagonist; chemoattractant; antiproliferative; dermatological; immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MDC analogue; macrophage derived chemokine; C-C chemokine; human;
                                                                                                                                                                                                                                                                                              Score 484; DB 22; Length 93;
Pred. No. 1e-50;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Raport CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human macrophage-derived C-C chemokine MDC analogue.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Godiska R, Gray PW,
                                                                                                                                                                                                                                                                                                                                                                                                                            61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 144; 147pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY05879 standard; Protein; 93 AA
                                                                                                                                                                                                                                                                                                99.08;
                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 98.50,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0067447
97US-0939107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-AUG-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Deeley MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-254715/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                    93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens.
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26-SEP-1997;
                                                                                                                                                                                                                                     macrophages
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chantry DH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                    Sequence
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                   The present sequence represents a synthetic analogue of the novel human macrophage derived C-C chemokine MDC (see also AAY05871). The analogue has an amino acid substitution at residue 2 of the mature polypeptide. MDC analogues (see also AAY05872-75) are expected to be antagonists of MDC, inhibiting activity by competitively binding to the receptor that recognises MDC or forming inactive heterodimers with MDC. MDC antagonists are used in claimed methods for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet argyfregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in a mammal, and for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MARLQTALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MDC; macrophage derived chemokine; C-C chemokine; macaque; antiagonist; chemotatractant; antiproliferative; dermatological; immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV: infection; lupus erythematosus; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Raport. CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 480; DB 20;
Pred. No. 3.2e-50;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Macaque macrophage-derived C-C chemokine MDC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "signal peptide"
25..93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY05880 standard; Protein; 93
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98.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chantry DH, Deeley MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-254715/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; AAX58338
                                                                                                                                                                                                                                                                                                                                                                                                                                   treating asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-AUG-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sednence
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AAY05880
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Claim 5; Page 147; 147pp; English

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correct themotive receptor. Macaque MDC shows about 94% amino acid sequence identity to human MDC. The invention provides vertebrate sequence identity to human MDC. The invention provides vertebrate MDC polypeptides (see also AAY0897), AAY08975 and AAY0897) and isolated polynucleotides encoding them, vectors and host cells, and methods for the recombinant or synthetic production of MDC. Also provided are used for the preparation of medicaments for the suppression of the preparation of medicaments for the suppression of the preparation of medicaments for the treatment or pallation of lupus erythematosus in a mammal, for inhibiting more agreement or pallation of lupus erythematosus in a mammal, for inhibiting more inhibiting or pallating an allergic reaction in a mammal, and for treating asthma (all claimed). MDC polypeptides are also used in claimed vaccine compositions.
                                                                                                                                                                                                                                                                                                                                        The present sequence represents a novel macaque C-C chemokine, designated macrophage derived chemokine (MDC), that binds to the
\overset{\mathsf{M}}{\times}\overset{\mathsf{M}}{\times}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\overset{\mathsf{M}}{\cup}\ove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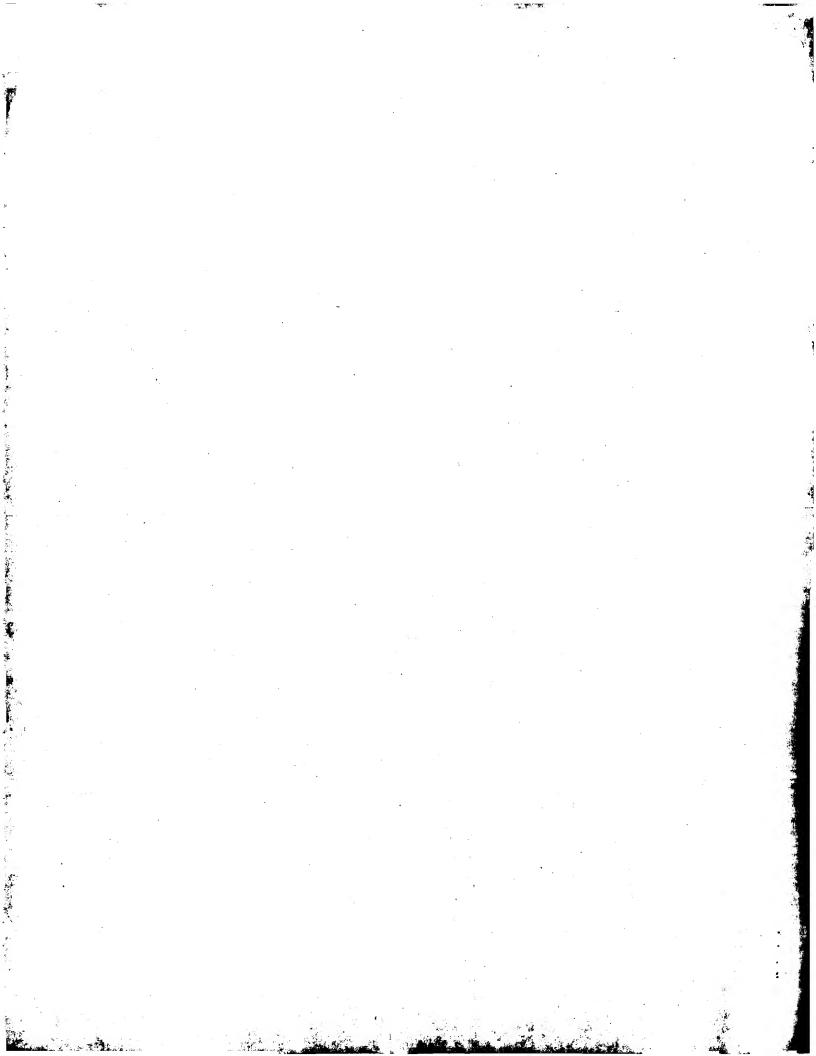
93 AA; Sequence

ö 1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60 0; Gaps 94.7%; Score 463; DB 20; Length 93; 93.5%; Pred. No. 3.6e-48; tive 2; Mismatches 4; Indels Query Match
Best Local Similarity 93.55
Matches 87; Conservative g õ

61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93 

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Search completed: July 28, 2003, 04:04:45 Job time: 21.3193 secs



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1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
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                                                                                                                                                                                                                                                                                                                                                                                                            E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/08480449
Patent No. 5688927
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER TRADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FO COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
APPLICATION NUMBER: US/08/480,449
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 489; DB 1;
100.0%; Pred. No. 5.2e-54;
1ve 0; Mismatches 0;
US-08-836-922-14
US-09-395-918-3
US-09-230-371A-25
US-09-230-371A-21
US-08-633-682-5
US-08-6395-918-5
US-08-95-918-5
US-08-173-209-2
US-08-173-209A-2
US-08-173-209A-2
US-08-173-209A-2
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US-08-173-209A-2
US-08-173-209A-2
US-08-173-209A-2
US-08-173-209A-2
US-09-34-951-2
US-09-34-951-2
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                                                                                                                                                                                                                                                 ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 27866/32779
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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3Y: linear
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Matches 93; Conserv
            ADDRESSEE:
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                                                                                               (without alignments) 350.133 Million cell updates/sec
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                                                                                   July 28, 2003, 03:59:58 ; Search time 7.81513 Seconds
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/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6A_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
              GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd
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.08-679-493A-155
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US-08-936-772-3
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                                                                                                                                                                                                                        262574 seqs, 29422922 residues
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Maximum Match 100%
Listing first 45 summaries

    protein search, using sw model

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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Perfect score:
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Indels

Length 93;

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                    TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking FILE REFERENCE: SUN-110PRV CURRENT APPLICATION NUMBER: US/09/232,878

CURRENT FILING DATE: 1999-01-15

NUMBER OF SEQ ID NOS: 6

SOFTWARE: FastSEQ for Windows Version 3.0
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STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                    Indels
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APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                      100.0%; Score 489; DB 4;
100.0%; Pred. No. 5.2e-54;
Live 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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COUNTRY: united States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC competible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/479,603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/08479603
Patent No. 6320023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
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Best Local Similarity 100.0
Matches 93; Conservative
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-479-603-2
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CLASSIFICATION: 530
                                                                                                                                                                                                 TYPE: PRT
CORGANISM: H. saplens
US-09-232-878-6
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  APPLICANT: Wu, Lijan
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                                                                                                                                                                     GENERAL INFORMATION:
GROISKA, RODALD
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
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STREET: 6300 Sears Tower, 233 South Wacker Drive
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                                                                                                                                                                                                                                                                                                                                                                      CITY: Chicago
STATE: Illinois
COUNTR: United States of America
ZIP: 6060-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: BATCHIN ROLOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 489; DB 2;
100.0%; Pred. No. 5.2e-54;
ive 0; Mismatches 0;
61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: GASS, DAVID A:
REGISTRATION NUMBER: 38,153
FREEDENAFF/DOCKET NUMBER: 27866/33318
                                                                                                                                Sequence 2, Application US/08660542 Patent No. 5932703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 6, Application US/09232878; Patent No. 6245332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISIES:
LENGTH: 93 amino acids
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Best Local Similarity 100.
Matches 93; Conservative
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APPLICANT: Campbell, James
APPLICANT: Rottman, James
                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 32 CORRESPONDENCE ADDRESS:
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MOLECULE TYPE: protein
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GY: linear
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US-08-660-542-2
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NAME/KEY: misc_feature
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1 MARLQTALLVVLVLALAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 93;
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5.2e-54;
                                                                                                                                                                                                                                   APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BEGKER FARM ROAD
                                       61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSO 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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0; Mismatches
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                                                                                                                                                                                            Sequence 2, Application PC/TUS9507294 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/464,594
FILING DATE: June 5, 1995
ATTORNEY/ACET INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95
FILING DATE: June 6, 1995
CLASSIFICATION:
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TELECOMONICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
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Matches 93; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                          CITY: ROSELAND
STATE: NEW JERSEY
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                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
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                                                                                                                                                                     PCT-US95-07294-2
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/note="The amino acid at position 24 is selected from the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucihe, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
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Borun
3: Marshall, O'Toole, Gerstein, Murray & 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38,153
ER: 27866/33318
                                                                                                COUNTRY: United States of America ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Gass, David A.
REGISTRATION NUMBER: 38,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: '25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide
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Gaps

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Indels

Length 70;

78.9%; Score 386; DB 2; 100.0%; Pred. No. 2.9e-41; tive 0; Mismatches 0;

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25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
                                                                                                                                                                           2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
                                                                                                           69; Conservative
        MOLECULE TYPE: peptide
                                                                  Query Match
Best Local Similarity
            US-08-660-542-30
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                       /note-"The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                    /note-"The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
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                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                          / Match 91.0%; Score 445; DB 2; Length 93; Local Similarity 93.5%; Pred. No. 1.7e-48; nes 87; Conservative 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Chicayo
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995.
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 30, Application US/08660542 Patent No. 5932703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                            misc_feature
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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FEATURE:
NAME/KEY: misc_feat
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STREET: 020.
-mv: Chicago
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
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Matches
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                                                                                                                                          Sequence 31, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
GROGISKA, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                          E: Marshall, O'Toole, Gerstein, Murray & 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 374; DB 2; 1
Pred, No. 9.1e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27866/33318
                                                                                                                                                                                                                                                                                                                                                                                                         STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 277
TELECOMMUNICATION INFORMATION:
TELEFHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 31:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 76.5%;
Best Local Similarity 97.1%;
Matches 67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gass, David A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER:
                      85 KMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                              STREET: 6300 (CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
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                                                                                                                      US-08-660-542-31
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SEQUENCE CHARACTERISTICS:
LENGTH: 89 AMINO ACIDS
TYPE: AMINO ACID
STRANDEDNESS:
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CITY: ROSELAND
     Hardwick
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                                                                                                                                                                                                                                        SEQ ID NO 26
LENGTH: 95
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 362; DB 2;
Pred. No. 2.9e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27866/33318
                                                                                                                                                                                                                                                                                                                                              COUNTRY: United States of America ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PROR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: GASS, DAVIG A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 26, Application US/09230637
Patent No. 6264958
GENERAL INFORMATION:
APPLICANT: Hayward, Gary
                                                                                        US-08-660-542-32
; Sequence 32, Application US/08660542
; Patent No. 5932703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
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94.2%;
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 94.2
Matches 65; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: peptide
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MEDIUM TYPE: Floppy
85 KMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: Si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                 Illinois
                                                                                                                                                                                                                                                                            ADDAL
STREET: 6500
TTY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            us-09-230-637-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-660-542-32
                                                                           RESULT 9
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TITLE OF INVENTION: Macrophage Inflammatory Protein.- 3 and
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS: A
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                           Reitz, Marvin
FENTION: No. 6264958el Genes of Kaposi's Sarcoma
FENTION: Associated Herpesvirus
NCE: 1107.78372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 33.5%; Score 164; DB 4; Length 95; Best Local Similarity 34.1%; Pred. No. 2.7e-13; Matches 31; Conservative 23; Mismatches 37; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                       , ORGANISM: Kaposi's sarcoma-associated herpes-like virus US-09-230-637-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: No. 6264958el Genes of R. TITLE OF INVENTION: Associated Herpesvirus FILE PEPERENCE: 110778372 CURRENT APPLICATION NUMBER: US/09/230,637 CURRENT FILING DATE: 1999-11-23 PRIOR FAPLICATION NUMBER: 06/022,591 PRIOR FILING DATE: 1996-07-25 PRIOR APPLICATION NUMBER: PCT US 97/12931 PRIOR FILING DATE: 1997-07-24 NUMBER OF SEQ ID NOS: 62 SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 PRPGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/08208339A Patent No. 5504003 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 3256
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/
, J. Marie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 201-994-1744 INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 MARCH 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
                                                                                                                                                                                                                                      1 MKGLAAALLVLVCTMALC----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Ruben, Steven M. APPLICANT: Ruben, Steven M. Tritle OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1) TITLE OF INVENTION: Polynucleotides and Polypeptides (As Amended) FILE REFERENCE: 1488.033000B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
US-08-375-36A-6
Sequence 6, Application US/08375346A
Sequence 6, Application US/08375346A
Setence 10. 5605817
GENERAL INFORMATION:
APPLICANT: Coleman, Roger
APPLICANT: Sellhamer, Jeffrey J.
TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
TITLE OF INVENTION: ITS PRODUCTION AND USES
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSE: INCYTE PHARMACEUTICALS, INC.
                                                                                                        Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 89;
                                                                                                                                                        34; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Score 157; DB 4; I; Pred. No. 1.9e-12; 18; Mismatches 34;
                                                                                                      Query Match 32.5%; Score 159; DB 3; Best Local Similarity 36.3%; Pred. No. 1.1e-12; Matches 33; Conservative 18; Mismatches 34
                                                                                                                                                                                                                                                                                                                                       61 PRPGVVLLTFRDKEICADPRVPWVKMILNKL 91
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/334,951
CURRENT FILING DATE: 1999-06-17
EARLIER APPLICATION NUMBER: US 08/208,339
EARLIER FILING DATE: 1994-03-08
EARLIER FILING DATE: 1995-06-05
EARLIER APPLICATION NUMBER: US 08/465,682
EARLIER PILING DATE: 1995-06-06
EARLIER FILING DATE: 1995-06-06
EARLIER FILING DATE: 1995-06-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/09334951
Patent No. 6451562
GENERAL INFORMATION:
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36.3%;
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                               MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapiens
US-09-334-951-6
       TOPOLOGY: linear
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Best Local Similarity
Matches 33; Conserv
                                                    US-08-722-719-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-334-951-6
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APPLICANT: ADAMS, MARK D.
TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
TITLE OF INVENTION: (M-CIF), MONOCYTE COLONY INHIBITORY FACTOR
TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR (MIP-4)
CORRESPONDENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESCITE
STREEF.
                                                                                                                                                        ä
                                                                                                                                                                                                    1 MARLQTALLUVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
                                                                                                                                                                                                                                                   1 MKGLAAALLVLVCTMALC----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
                                                                                                                                                          Gaps
                                                                                                                                                        ;
9
                                                                                                      Length 89;
                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                        34;
                                                                                                Query Match 32.5%; Score 159; DB 1; Best Local Similarity 36.3%; Pred. No. 1.1e-12; Matches 33; Conservative 18; Mismatches 34
                                                                                                                                                                                                                                                                                                     61 PRPGVVLLTFRDKEICADPRVPWVKMILNKL 91
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55 PKPGVILLTKRGRQICADPNKKWVQKYISDL 85
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,209
FILING DATE: 22-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/208,339
FILING DATE: 08-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/46,881
FILING DATE: 05-MAY-1995
PRIOR APPLICATION NUMBER: US 08/465,682
FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/722,719
FILING DATE: 30-SEP-1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/08722719
Patent No. 6001606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 89 amino acids
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
US-08-208-339A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20005-3934
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                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
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2 LAAALLVLVCTWALC----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKP 55
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 153; DB 2;
Pred. No. 5.1e-12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Mismatches
                                                                                                                                                                                    NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0026-1 DIV
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-555-0555
TELEPRAX: 415-845-4166
                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,123B
FILLING DATE: 06-JUN-1995.
CLASSIFICATION: 530
                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375,346
FILING DATE: 19-JAN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Search completed: July 28, 2003, 04:05:36 Job time: 9.81513 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64 GVVLLTFRDKEICADPRVPWVK 85
                                                                                                                                                                                                                                                                                                                                                    LENGTH: 78 amino acids
                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31; Conservative
                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                            FILING DATE: 06 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-467-123B-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 LQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 78; 5.1e-12;
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Patent No. 5945506
GENERAL INFORMATION:
APPLICANT: Coleman, Roger
APPLICANT: Seilhamer, Jeffrey J.
TITLE OF INVENTION: CHEMOKINE EXPRESSED IN FETAL SPLEEN,
TITLE OF INVENTION: ITS PRODUCTION AND USES
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16; Mismatches
                                                                                                                    MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fast5EQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/375,346A
FILING DATE: 19-JAN-1995
CLASIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31.3%; Score 153; 37.8%; Pred. No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64 GVVLLTFRDKEICADPRVPWVK 85
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GVILLTKRGRQICADPNKKWVQ 77
3330 HILLVIEW AVENUE
                                                                                                                                                                                                                                                                                                                                                                     NAME: LUTHER, BARBARA J. REGISTRATION NUMBER: 33,954
REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (415) 855-0555
TELEFAX: (415) 855-0572
                                                                                                                                                                                                                                                                                                                            FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 37.89
Matches 31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                           ZIP: 94304
COMPUTER READABLE FORM:
                   CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-375-346A-6
                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
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ADDRESSEE: Incyte Pharmaceuticals, Inc. STREET: 3174 Porter Drive

ADDRESSEE:

CITY: Palo Alto

STATE: C COUNTRY:

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATI

94304

COMPUTER: IBM CO OPERATING SYSTEM:

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(without alignments)
869.687 Million cell updates/sec
                                                                                                                                                                                                                     ; Search time 12,6996 Seconds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. (cgn2_6/ptodata/2/pubpaA/USO7_NEW_PUB.pep:*
2. (cgn2_6/ptodata/2/pubpaA/USO7_NEW_PUB.pep:*
3. (cgn2_6/ptodata/2/pubpaA/USO6_NEW_PUB.pep:*
4. (cgn2_6/ptodata/2/pubpaA/USO6_NEW_PUB.pep:*
5. (cgn2_6/ptodata/2/pubpaA/USO6_PUBCOMB.pep:*
6. (cgn2_6/ptodata/2/pubpaA/USO8_NEW_PUB.pep:*
7. (cgn2_6/ptodata/2/pubpaA/USO8_NEW_PUB.pep:*
8. (cgn2_6/ptodata/2/pubpaA/USO8_NEW_PUB.pep:*
9. (cgn2_6/ptodata/2/pubpaA/USO8_NEW_PUB.pep:*
10. (cgn2_6/ptodata/2/pubpaA/USO9_NEW_PUB.pep:*
11. (cgn2_6/ptodata/2/pubpaA/USO9_NEW_PUB.pep:*
12. (cgn2_6/ptodata/2/pubpaA/USO9_NEW_PUB.pep:*
13. (cgn2_6/ptodata/2/pubpaA/USO9_NEW_PUB.pep:*
14. (cgn2_6/ptodata/2/pubpaA/USO9_PUBCOMB.pep:*
15. (cgn2_6/ptodata/2/pubpaA/USO9_PUBCOMB.pep:*
16. (cgn2_6/ptodata/2/pubpaA/USO9_PUBCOMB.pep:*
17. (cgn2_6/ptodata/2/pubpaA/USO9_NEW_PUB.pep:*
18. (cgn2_6/ptodata/2/pubpaA/USO9_NEW_PUB.pep:*
19. (cgn2_6/ptodata/2/pubpaA/USO0_NEW_PUB.pep:*
11. (cgn2_6/ptodata/2/pubpaA/USO0_NEW_PUB.pep:*
11. (cgn2_6/ptodata/2/pubpaA/USO0_NEW_PUB.pep:*
11. (cgn2_6/ptodata/2/pubpaA/USO0_NEW_PUB.pep:*
11. (cgn2_6/ptodata/2/pubpaA/USO0_PUBCOMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           451899 seqs, 118759770 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Published_Applications_AA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                 - protein search, using sw model
                                                                                                                                                                                                                  July 28, 2003, 04:04:49
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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489
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                 OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
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                                                                                                                                                                                                                     Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

## Sequence 6, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 3, Appli Sequence 7, Appli Sequence 7, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 792, App Sequence 3, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence Sequence Sequence Sequence Sequence Description US-09-837-446-6 US-09-811-088-2 US-10-314-410-2 US-09-908-599-2 US-10-001-221A-7 US-09-334-923A-6 US-09-334-925A-6 US-09-321-332-792 US-09-314-923A-6 US-09-314-923A-6 US-09-314-923A-6 US-09-314-923A-6 US-09-314-923A-6 US-09-314-938-3 US-10-158-366-6 US-09-834-795A-8 US-10-158-366-6 US-09-834-795A-8 SUMMARIES DB Length 993337771777777788899333333777888993333 Query Match I 1000.0 1000.0 1000.0 999.0 999.0 999.0 999.0 131.3 131.3 131.3 131.3 131.3 489 489 489 484 484 513 1159 1159 1153 1153 1153 1153 Result No.

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93 93

RESULT 2 US-09-811-088-2

Sequence 21, Appl Sequence 29, Appl Sequence 29, Appl Sequence 1, Appl Sequence 1, Appl Sequence 5, Appl Sequence 12, Appl Sequence 6, Appl Sequence 6, Appl Sequence 6, Appl Sequence 2, Appl Sequence 3, Appl Sequence 3, Appl Sequence 5, Appl Sequence 6, Appl Sequence 7, Appl Sequence 6, Appl Sequence 7, Appl Sequence 6, Appl Sequence 6, Appl Sequence 6, Appl Sequence 7, Appl Sequence 6, Appl Sequence 7, Appl Sequence 7, Appl Sequence 7, Appl Sequence 6, Appl Sequence 7, Appl Sequence 1, Appl Se	n 93;
30.8 91 8 US-08-927-939-21 30.8 91 10 US-09-144-838-9 30.8 91 10 US-09-144-838-9 30.8 91 12 US-09-844-794A-29 30.8 91 12 US-09-920-137A-8 30.8 91 12 US-09-920-137A-8 30.8 91 12 US-09-920-137A-8 30.8 91 15 US-10-158-366-5 30.8 91 15 US-10-057-275-8 30.8 91 15 US-10-057-275-8 29.4 73 10 US-09-144-838-6 29.2 70 10 US-09-144-838-6 29.2 70 10 US-09-344-954A-65 29.2 70 10 US-09-344-954A-65 28.8 93 10 US-09-344-954A-3 28.8 93 12 US-09-334-954A-3 28.8 93 12 US-09-334-954A-3 28.8 93 12 US-09-334-393-4 28.8 93 12 US-09-334-393-4 28.8 93 12 US-09-3372-348-6 28.8 93 12 US-09-3372-348-6 28.8 93 12 US-09-3372-348-6 28.8 93 12 US-09-3372-348-6 28.8 93 12 US-09-3372-348-7 28.9 92 12 US-09-3372-348-7 28.3 92 10 US-09-834-794A-31 28.3 92 10 US-09-834-794A-31 28.3 92 12 US-09-834-794A-31 28.3 PURPLICATION US/09837446 20020019341A1	11, James an Modulat Traffi N-110CON NUMBER: 01999-01-999-01-01-00-00
A A A A A A A A A A A A A A A A A A A	APPLICANT: Campbell APPLICANT: Rottman, APPLICANT: Wu, Lijan TITLE OF INVENTION: TITLE OF INVENTION: FILE REFERENCE: STAN CURRENT FILING DATE: PRIOR PPLICATION NUJ PRIOR APPLICATION NUJ PRIOR APPLICATION NUJ NUMBER OF SEQ ID NOS SOFTWARE: FastSEQ for SOFT NOS OF SEQ ID NOS CORGANISM: H. Sapien: US-09-837-446-6 Query Match Best Local Similarity Matches 93; Conser'

Gaps

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1 MARIQTALLUVULVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 489; DB 15; Best Local Similarity 100.0%; Pred. No. 7.3e-50; Matches 93; Conservative 0; Mismatches 0;
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99.0%; Score 484; DB 10;
Best Local Similarity 98.9%; Pred. No. 2.8e-49;
Matches 92; Conservative 1; Mismatches 0;
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NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: HUMAN GENOME SCIENCES, INC.
STREET: 9410 KEY WEST AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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TITLE OF INVENTION: Human Chemokine Beta 13
FILE REFERENCE: PF177P3
CURRENT APPLICATION NUMBER: US/09/908,599
CURRENT FILING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: 09/432,768
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1999-12-05
NUMBER OF SEQ ID NOS: 22
SOFTWARE: PALENTIN Ver. 2.0
PRIOR APPLICATION NUMBER: US 09/354,809
PRIOR FILING DATE: 1999-07-16
PRIOR FILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FastSEQ for Windows Version 4.0
LENGTH: 93
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; Sequence 2, Application US/09908599
; Patent No. US20020055147Al
; GENERAL INPORMATION:
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                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo sapiens US-10-314-410-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CRGANISM: Homo sapiens US-09-908-599-2
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LENGTH: 93
                                                                                                                                                                                                                                                       TYPE: PRT
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                                               SERIERAL INFORMATION:
APPLICANT: Holtzman, Douglas A.
APPLICANT: Holtzman, Douglas A.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Ban, Yang
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: PROGNATIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
TITLE OF INVENTION: USES
FILE REFERENCE: 0734-324001
CURRENT PLILNG DAME: 2001-03-16
PRIOR PRICATION NUMBER: US 09/712,726
PRIOR PLILNG DATE: 1997-03-12
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
PRIOR PLILNG DATE: 1997-07-16
PLING DATE: 1997-07-16
PRIOR PLILNG DATE: 1997-07-16
PRIOR PLING DATE: 1997-07-16
PRIOR PLING DATE: 1997-07-16
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Sequence 2, Application US/10314410

Publication No. US20030125540A1

GENERAL INFORMATION:

APPLICANT: HOILTEAND, David P.

APPLICANT: Ban, Yang

TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING

TITLE OF INVENTION: USES

FILE REPERENCE: 07334-324001

CURRENT APPLICATION NUMBER: US/10/314,410

CURRENT FILING DATE: 2000-12-06

PRIOR PAPLICATION NUMBER: US/09/811,088

PRIOR APPLICATION NUMBER: US 09/712,726

PRIOR APPLICATION NUMBER: US 09/712,726

PRIOR PELING DATE: 2000-11-14

PRIOR PELING DATE: 1907-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
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Best Local Similarity 100.0%; Pred. No. 7.3e-50;
Matches 93; Conservative 0; Mismatches 0;
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APPLICATION NUMBER: US 08/843,651
FILING DATE: 1997-04-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 09/757,421
PRIOR FILING DATE: 2001-01-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/843,652
      Sequence 2, Application US/09811088
Patent No. US20020160446A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-811-088-2
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Gaps

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APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica x-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR PELING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR PAPLICATION NUMBER: US 60/207,366
PRIOR PELING DATE: 2000-00-65-36
PRIOR PELING DATE: 2000-10-04
PRIOR PELING DATE: 2000-10-04
PRIOR PELING DATE: 2000-00-09-27
PRIOR PELING DATE: 2001-01-30
                                                                                                                                                            Talbot, Dale Berkowitz, Robert Taltot, Dale Berkowitz, Robert Frenack Brett Howard, Maureen Frenack Brett Howard, Maureen FILE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE CURRENT APPLICATION NUMBER: US/10/001,221A CURRENT FILING DATE: 2001-10-30 PRIOR APPLICATION NUMBER: 09/834,814 PRIOR APPLICATION NUMBER: 09/834,814 PRIOR FILING DATE: 2001-04-20 NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin version 3.1 SEQ ID NO 7 LEWARD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33 DSV-----CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 43.9%; Score 214.5; DB 15; Length 67; Best Local Similarity 58.5%; Pred. No. 6.8e-18; Matches 38; Conservative 13; Mismatches 9; Indels 5
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Sequence 43730, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Hank, David R.
APPLICANT: Hanzel, David K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Chimeric molecule US-10-001-221A-7
                                                                                                                                               Sequence 7, Application US/10001221A Publication No. US20030108515A1 GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Premack APPLICANT: Zheng, Wei Premack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial sequence
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61 KKLLHKLS 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88 LNKLS 92
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63 LHKLS 67
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                                                                                                       RESULT 7
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Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Schall, Thomas J. Premack, Brett Howard, Maureen
TITLE OF INFORTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                     COMPUTER READABLE FORM:
MEDIUW TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn_Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 484; DB 10;
Pred. No. 2.8e-49;
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                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: CUNROWN>
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEBHONE: (301) 309-8504
TELEFRANCE (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin version 3.1
SEQ ID NO 3
LENGTH: 68
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98.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 99.0
Best Local Similarity 98.9
Matches 92; Conservative
COUNTRY: 20850
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US-10-001-221A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
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Best Local Similarity
Matches 44; Conserv
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Sequence 6, Application US/09334954A

Sequence 6, Application US/09334954A

Sequence 6, Application US/09334954A

Sequence 6, Application US/09334954A

SEATER 1 INFORMATION:

APPLICANT: L1, Handong

TITLE OF INVENTION: As Amended)

TITLE OF INVENTION: (As Amended)

STILE OF INVENTION WIBER: US/09/334,954A

CURRENT FILING DATE: 1994-06-17

PRIOR FILING DATE: 1994-03-08

PRIOR APPLICATION NUMBER: US 08/46,681

PRIOR FILING DATE: 1995-06-06

PRIOR FILING DATE: 1995-06-06

PRIOR FILING DATE: 1995-06-06

PRIOR PRILING DATE: 1995-06-06

PRIOR FILING DATE: 1995-06-06

PRIOR PRILING DATE: 1996-09-30

NUMBER OF SEQ ID NOS: 65

SOFTWARE: PATENTIN VET: 2.0
                                                                                                                                                                            1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
                                                                                                                                                                                                                       1 MARLQTALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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                                   Length 89;
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TILE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PAIO4
CURRENT APPLICATION NUMBER: US/09/925,302
CURRENT APPLICATION NUMBER: PCI/US00/05918
PRIOR APPLICATION NUMBER: PCI/US00/05918
PRIOR PLING DATE: 2000-03-08
PRIOR FILING DATE: 1099-0312
NUMBER OF SEQ ID NOS: 896
SOFTWARE: Patentin Ver. 2.0
                                                                                                        Indels
                                                                                                        18; Mismatches 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; DB 10;
2.9e-11;
                                Score 159; DB 10;
Pred. No. 2.9e-11;
                                                                                                                                                                                                                                                                                                                                                         61 PRPGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32.5%; Score 159; DB
36.3%; Pred. No. 2.9e
tive 18; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 792, Application US/09925302 Patent No. US20020044941A1
                                32.5%;
36.3%;
                                Query Match
Best Local Similarity 36.3%
Matches 33; Conservative
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Best Local Similarity 36.39
Matches 33; Conservative
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US-09-334-954A-6
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APPLICANT: Ruben, Steven M.
APPLICANT: Ruben, Steven M.
APPLICANT: L1, Haodong
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As Amende FILE REFERENCE: 1488.033000D
CURRENT APPLICATION NUMBER: US/09/334,923A
CURRENT APPLICATION NUMBER: US 08/208,339
PRIOR APPLICATION NUMBER: US 08/446,881
PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR FILING DATE: 1995-05-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1996-09-30
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NOS: 65
SEQ ID NOS: 65
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN EFTAL LIVER, SIGNAL = 0.73
OTHER INFORMATION: EXPRESSED IN BETAL LIVER, SIGNAL = 0.73
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.75
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.73
OTHER INFORMATION: STATEMENT W61220.1, EVALUE 8.50e-01
US-09-864-761-43730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EXPRESSED IN PLACENTA, SIGNAL = 6.3
                                           PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION UNMER: PCT/US01/00668

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PLICATION NUMBER: PCT/US01/00661

PRIOR APPLICATION NUMBER: PCT/US01/00661

PRIOR APPLICATION NUMBER: PCT/US01/00661

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2000-09-21

PRIOR PLICATION NUMBER: US 60/234,687

PRIOR PLICATION NUMBER: US 60/234,687

PRIOR PLICATION NUMBER: US 09/608,408

PRIOR FILING DATE: 2000-06-30

PRIOR PLICATION NUMBER: US 09/774,203

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: PRIOR DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: PRIOR DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: PRIOR DATE: 2001-01-30

PRIOR PILING DATE: PRIOR DATE: 2001-01-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2000-06-30

PRI
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APPLICATION NUMBER: PCT/US01/00665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application US/09334923A Patent No. US20020061551A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0
Matches 37; Conservative
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE: OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-334-923A-6
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Matches
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                                                                                                                                                                                                                          APPLICANT: Simon, Reyna APPLICANT: Simon, Reyna APPLICANT: Kent, Stephen B.H. TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation FILE REFERENCE: GRRN-020/0102
                                                                                                                                                                                                    1 MARIQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12 CCYGFQQHPPPYQILKEMYPTSPACPKPGVILLTKRGRQICADPSKNWVRQLMQRL 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic US-09-144-838-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 31.3%; Score 153; DB 10; Length 71; Best Local Similarity 42.9%; Pred. No. 1:1e-10; Matches 24; Conservative 17; Mismatches 15; Indels
                                                                                                                       Length 97,
                                                                                                                     Query Match 32.5%; Score 159; DB 10; Length 9 Best Local Similarity 36.3%; Pred. No. 3.2e-11; Matches 33; Conservative 18; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Incyte Pharmaceuticals, Inc. STREET: 3174 Porter Drive CITY: Palo Alto
                                                                                                                                                                                                                                                                                                       61 PRPGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/144,838A.
CURRENT FILING DATE: 1998-08-31
EARLIER APPLICATION NUMBER: US 60/057,620
EARLIER FILING DATE: 1997-09-04
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 3
LENGTH: 71
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/09144838A Patent No. US20020051996A1 GENERAL INFORMATION:
APPLICANT: Siani, Michael A. APPLICANT: Wilken, Jill
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 6, Application US/10158366
; Publication No. US20020142398A1
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Coleman, Roger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
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COUNTRY: USA
                                       TYPE: PRT
CORGANISM: Homo sapiens
US-09-925-302-792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-158-366-6
SEQ ID NO 792
LENGTH: 97
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APPLICANT: Zheng, Wei Premack, Brett Howard, Maureen TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE FILE REPERBNCE: 10709/14
CURRENT APPLICATION UNBER: US/10/001,221A
CURRENT FILING DATE: 2001-030
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 LAAALLUVUVCTWALC----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKP 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 LQTALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch 31.3%; Score 153; DB 15; Similarity 37.8%; Pred. No. 1.3e-10; 31; Conservative 16; Mismatches 29;
                                                                                                                                                                                                                                                                           NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0026-1 DIV
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-555-0555
                                                                    FILING DATE: 29-May 2002
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/467,123B
FILING DATE: 06-JUN-1995
APPLICATION NUMBER: US 08/375,346
FILING DATE: 19-JAN-1995
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/158,366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Chimeric molecule
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/10001221A; Publication No. US20030108515A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16;
                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 415-845-4166 INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Schall, Thomas J. APPLICANT: Zheng, Wei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 40.89
Matches 29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-001-221A-6
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LENGTH: 78
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83 WVKMILNKLSQ 93

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Sequence:

on:

Searched:

Database

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Sequence 2, Appli
Sequence 27, 26, A
Sequence 27, Appli
Sequence 2007, Appli
Sequence 2007, Appli
Sequence 2007, Appli
Sequence 2007, Appli
Sequence 2, Appli
Sequence 25, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 489; DB 1; Length 93; larity 100.0%; Pred. No. 4.8e-51; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Campbell, James
APPLICANT: Rottman, James
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: C2 CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: C2 CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: C2 CHEMOKINE PRILIAGE
CURRENT FILING DATE: 2000-01-14
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 3.0
                               US-08-939-107-2
US-09-067-447-2
US-09-067-447-2
US-09-067-4478-2
US-09-591-92-2
US-09-591-92-2
US-09-712-726-2
US-09-712-726-2
US-09-711-088-2
US-09-811-088-2
US-09-760-476-2007
US-09-760-476-2007
US-10-216-245-2007
US-10-216-245-2007
                                                                                                                                                                                                                                                                                                              US-08-986-188-2
US-09-432-768-2
US-09-4421-2
US-09-908-599-2
US-09-908-600-2
US-10-137-438-2
US-09-067-447-41
US-09-067-447-41
US-09-509-165A-41
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US-09-067-447-25
US-09-067-447-25
US-09-067-447B-25
US-09-509-165A-25
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PCT-US00-30237-2
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US-08-925-857-10
                  US-08-931-764B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
93; Conserv
                                CT-US00-00953-6
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                                                                                                                      SEQ ID NO 6
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(without alignments)
562.075 Million cell updates/sec
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Sequence 2,
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                                                                                                    July 28, 2003, 04:00:39 ; Search time 106.676 Seconds
                                                                                                                                                                                                         1 MARLQTALLVVLVLLAVALQ......EICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                    4569144
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2: 'Cgn2_6'ptodata/1/paa/US06_COMB.pep:*
3: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
4: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
5: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
6: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
7: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
8: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
9: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
10: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
11: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
12: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
13: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
14: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
15: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
16: 'Cgn2_6'ptodata/1/paa/US08_COMB.pep:*
16: 'Cgn2_6'ptodata/1/paa/US09_COMB.pep:*
16: 'Cgn2_6'ptodata/1/paa/US09_COMB.pep:*
16: 'Cgn2_6'ptodata/1/paa/US09_COMB.pep:*
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6/ptodata/1/paa/US096_COMB.pep:*
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6/ptodata/1/paa/USO89_COMB.pep:*
6/ptodata/1/paa/USO90_COMB.pep:*
6/ptodata/1/paa/USO91_COMB.pep:*
6/ptodata/1/paa/USO93_COMB.pep:*
6/ptodata/1/paa/USO93_COMB.pep:*
6/ptodata/1/paa/USO93_COMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cgn2_6/ptodata/1/paa/US101_COMB.pep:
/cgn2_6/ptodata/1/paa/US102_COMB.pep:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /cgn2_6/ptodata/1/paa/US60_COMB.pep:*
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US-08-464-594-2
US-08-479-620-2
US-08-558-658-2
US-08-760-127-3
US-08-820-364-2
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                                                                 OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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                                                                                                                                                                          US-09-509-165A-2
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Match Length
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Sequence 2, Appli Sequence 2, Appli Sequence 3, Appli Sequence 2, Appli

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1 MARLOTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
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GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 93;
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                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,620
FILING DATE:
CLASSIFICATION: 536
ATTONREY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 489; DB 8; Best Local Similarity 100.0%; Pred. No. 4.8e-51; Matches 93; Conservative 0; Mismatches 0;
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33009
                                                                                                                                                                                                                                                                                                                 38,153
ER: 27866/32628
: Illinois
RY: United States of America
60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/558,656
                                                                                                                                                                                                                                                                             ATTONING
NAME:
Gass, ____BER:
REGISTRATION NUMBER: 27800
REFERENCE/DOCKET NUMBER: 27800
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300

"TELEPHONE: 312/474-6408
                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 312/474-0448
TELEX: 25-3656
INFORMATION FOR SEG ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-479-620-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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CITY: Chicago
STATE: Illinois
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                           COUNTRY:
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GENERAL INFORMATION:
APPLICANT: GOAISKA, Ronald
APPLICANT: Gray, Partick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                              APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 489; DB 8;
100.0%; Pred. No. 4.8e-51;
ive 0; Mismatches 0;
                           61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
    61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/25
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,594
FILING DATE: June 5, 1995
CLASSIFICATION 135
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                          Sequence 2, Application US/08464594 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 36,134
REFERENCE/POCKET NUMBER: 32
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 93 AMINO ACIDS
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Best Local Similarity
Matches 93; Conserv
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                                                                                                              RESULT 2
US-08-464-594-2
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61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                       Diskette
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INFORMATION FOR SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: protein
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California
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                                                                                                                                                                                                                                                                                                                           COUNTRY: US ZIP: 02110-2804
                                                                                                                                                                                                                                                                                         Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
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                                                                                           US-08-820-364-2
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                                                                                                                                                                                                                                                                                                             STATE:
                                                                           RESULT 6
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                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                 Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/08760127
GENERAL INFORMATION:
APPLICANT: Andrew, Ming-shi
APPLICANT: Andrew, David P.
TITLE OF INVENTION: NOVEL PROTEIN WITH CHEMOKINE ACTIVITY
UNMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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CURRENT APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

FILING DATE:

ATORNEX/AGENT INFORMATION:

NAME: Whiteford, wendy A.

REGISTRATION NUMBER: 36,964

REFERENCE/DOCKET NUMBER: A-429

TELEPHONE: (805) 447-1008

TELEPHONE: (805) 447-1008

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 489; DB 11;
100.0%; Pred. No. 4.8e-51;
iive 0; Mismatches 0;
                                                                                                                                                                                                                             Score 489; DB 9;
Pred. No. 4.8e-51;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                     61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Amgen Inc.
1840 De Havilland Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                             Query Match 100.0%; So
Best Local Similarity 100.0%; Po
Matches 93; Conservative 0;
TELECOMMUNICATION INFORMATION:
               TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93 amino acids
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MOLECULE TYPE: protein
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                                                                                                                                 amino acid
GY: linear
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Best Local Similarity
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CITY: The STATE: C
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10.08-925-857-12
Sequence 12, Application US/08925857
GENERAL INFORMATION:
APPLICANT: Gorman, Daniel M.
APPLICANT: Hedrick, Joseph A.
APPLICANT: 2lotnik, Albert
TITLE OF INFORTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
Sequence 2, Application US/08820364
GENERAL INFORMATION:
APPLICANT: Gearing, David P.
APPLICANT: Pan, Yang
TITLE OF INVENTION: THYMOTAXIN AND USES THEREFOR NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 489; DB 12; Best Local Similarity 100.0%; Pred. No. 4.8e-51; Matches 93; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASISED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/820,364
FILING DATE: 12-MAR-1997
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER:
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STREET: 901 California Ayenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
ATTORNEY/AGENI INFORMATION:,
...thiedehn. Ph.D., Anita L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Meiklejohn, Ph.D., An
REGISTRATION NUMBER: 35,283
REFERENCE/DOCKET NUMBER: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
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18,872
                        REFERENCE/DOCKET NUMBER:
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Best Local Similarity 100.(
Matches 93; Conservative
                                                                                                                             LENGTH: 93 amino acids TYPE: amino acid
                                                                                                                                                                            ; MOLECULE TYPE: protein US-08-931-764-2
        REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Homo sapiens
US-08-931-764B-2
                                                                                                                                                               linear
                                                                                                                                                             TOPOLOGY:
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APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: AS AN APPLICANT: FOR THE TREATMENT AND PREVENTION
TITLE OF INVENTION: OF LENTIVIRUS INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 93;
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Query Match 100.0%; Score 489; DB 13; Best Local Similarity 100.0%; Pred. No. 4.8e-51; Matches 93; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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: 1155 Avenue of the Americas
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/931,764
FILING DATE: To be assigned
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Misrock, S. Leslie
                                                                                                                                                                                                                                                                      DX0614K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-931-764-2; Sequence 2, Application US/08931764
                                                                                                                                                                                                                                   NAME: Ching, Edwin P. REGISTRATION NUMBER: 34,090
                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
TELEFAX: 650-496-1200
                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Gallo, Robert APPLICANT: Garkham, Phila APPLICANT: Garkham, Phila APPLICANT: Garkham, Phila CHILE OF INVENTION: AS ATITLE OF INVENTION: OF LUMBER OF SEQUENCES: 2 CORRESPONDENCE ADDRESS: GARKET: 1155 Avenue of Editory
                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-925-857-12
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ZIP: 10036/2711
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US-08-939-107-2

Sequence 2, Application US/08939107

Sequence 2, Application US/08939107

GENERAL INFORMATION:

APPLICANT: Godiska, Ronald

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

APPLICANT: Raport, Carol J.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND

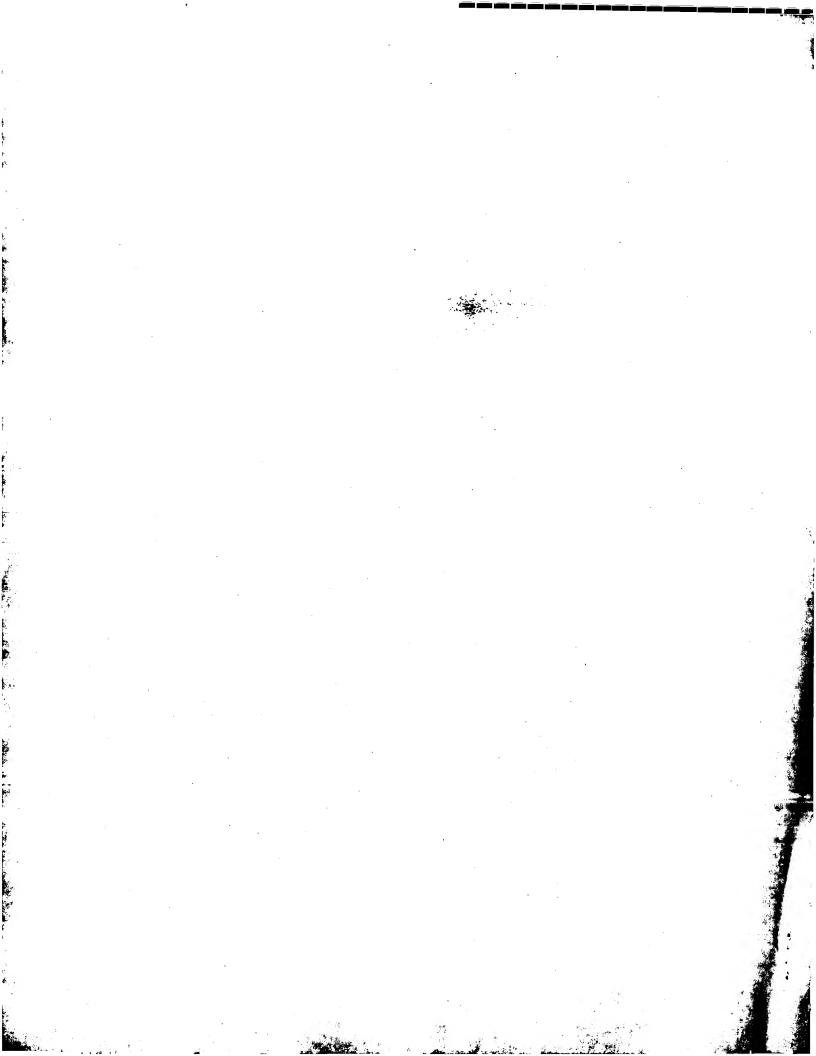
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF

NUMBER OF SEQUENCES: 40
                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MARLQTALLVVLVLVLVLVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                       Length 93;
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100.0%; Pred. No. 4.8e-51;
11ve 0; Mismatches 0;
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100.0%; Pred. No. 4.8
vative 0; Mismatches
8769-029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/08931764B GENERAL INFORMATION:
                 TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
TELEEX: 212-869-8864
TELEX: 66141 PENNIE
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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Sequence 2, A-p4
Sequence 3, Ronald
A-p4PLICANT: Godiska. Ronald
A-p4
Septicant: Godiska. Ronald
A-p4
Septicant: Raport, Carol J.
TITLE OF INVENTION: MACROHAGE DERIVED CHEMOKINE
TITLE OF INVENTION: MACROHAGE DERIVED CHEMOKINE
FILE REFERENCE: 27866/34404
CURRENT A-P4PLICATION NUMBER: US/99/067,447A
CURRENT A-P4PLICATION NUMBER: 08/939,107
SEARLIER A-P4LICATION NUMBER: 08/939,107
SEARLIER A-P4LICATION NUMBER: 08/660,542
SEARLIER PILING DATE: 1996-06-07
SEARLIER PILING DATE: 1995-11-16
SEARLIER PILING DATE: 1995-11-16
SEARLIER PILING DATE: 1995-06-07
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                                                                                                         PRIOR APPLICATION:
PRIOR APPLICATION:
PRIOR APPLICATION NUMBER:
PLING DATE: 26-SEPT-1997
PRIOR APPLICATION NUMBER: 08/939,107
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/58,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/479,620
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; LOCATION:
; OTHER INFORMATION: /note - "human MDC"
US-09-067-447-2
                                          APPLICATION NUMBER: US/09/067,447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            312/474-6300
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Best Local Similarity 100.0
Matches 93; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 25-3856
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
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                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
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GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
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STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
                                     E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
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COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/939,107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 489; DB 13; Best Local Similarity 100.0%; Pred. No. 4.8e-51; Matches 93; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTONREY/AGENT INFORMATION:
NAME: GASS, DATIG ASS, DA
                                                                                                         CITY: Chicago
STATE: 1111nois
COUNTY: United States of America
ZIP: 6060-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-939-107-2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
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US-09-067-447-2
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APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Devico, Anthony L.
APPLICANT: Devico, Alfedo
TITLE DE INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
TITLE REFERENCE: 4115-109 CIP
CURRENT PAPLICATION NUMBER: US/09/591,992
CURRENT FILING DATE: 2000-06-12
PRIOR PELICATION NUMBER: PCT/US98/26291
PRIOR FILING DATE: 1998-12-11
PRIOR FILING DATE: 2000-03-02
PRIOR FILING DATE: 2000-03-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Gray et al.
APPLICANT: Gray et al.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
TITLE OF INVENTION: INIBIATOR SUBSTANCES, AND USES THEREOF
FILE REFERENCE: 27866/34810
CURRENT APPLICATION NUMBER: US/09/509,165A
CURRENT FILING DATE: 1998-04-28
PRIOR FILING DATE: 1998-04-28
PRIOR FILING DATE: 1998-04-28
PRIOR FILING DATE: 1997-09-26
PRIOR PELING DATE: 1996-06-07
PRIOR APPLICATION NUMBER: 08/660,542
PRIOR APPLICATION NUMBER: 08/560,607
PRIOR APPLICATION NUMBER: 08/560,607
PRIOR FILING DATE: 1995-06-07
SOFTWARE: PATENTING NOWER: 08/550,650
PRIOR FILING DATE: 1995-06-07
SOFTWARE: PATENTING NOWER: 08/550,650
PRIOR FILING DATE: 1995-06-07
SOFTWARE: PATENTING NOWER: 08/550,650
PRIOR FILING DATE: 1995-06-07
                                                                                                                                                                                                                                                   1 MARLOTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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                                                                                                                                                                     Gaps
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                                                                                                             Length 93;
                                                                                                                                                                  Indels
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                                                                                                             Score 489; DB 14;
Pred. No. 4.8e-51;
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Pred. No. 4.8e-51;
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100.0%; Score 489; Di
Best Local Similarity 100.0%; Pred. No. 4.8
Matches 93; Conservative 0; Mismatches
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        ; LOCATION:
; OTHER INFORMATION: /note - "human MDC"
US-09-067-447B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/09509165A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo sapiens - human MDC
US-09-509-165A-2
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Best Local Similarity 100.0
Matches 93; Conservative
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US-09-509-165A-2
LOCATION:
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APPLICANT: Chantry, David H.
APPLICANT: Cheeley, Michael C.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC
TITLE OF INVENTION: ACTIVITY
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                                                                                                                                                                                              Gaps
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                                                                                                                                         Length 93;
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CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                           Indels
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                                                                                                                                   ch 100.0%; Score 489; DB 14; Similarity 100.0%; Pred. No. 4.8e-51; 93; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                        PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                 61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/58,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                         ; TYPE: PRT
; ORGANISM: Homo sapiens - human MDC
US-09-067-447-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09067447B GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 276
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPRAX: 312/474-0448
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                   Query Match
Best Local Si
Matches 93;
  LENGTH: 93
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| PRIOR APPLICATION NUMBER: US 60/069,281
| PRIOR FILING DATE: 1997-12-11
| NUMBER OF SEQ ID NOS: 7
| SOFTWARE: Patentin version 3.1
| SEQ ID NO 2
| LENGTH: 93
| TYPE: PRT | 100.0%; Score 489; DB 19; Length 93; Oscore 489; DB 19; Length 93; DB 19; Length 93; Oscore 489; DB 19
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(without alignments)
748.942 Million cell updates/sec
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                                                                                                                                       July 28, 2003, 04:02:59; Search time 32.8235 Seconds
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
                                                                                             OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
                                                                                                                                                                                                                                     US-09-509-165A-2
489
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Perfect score:
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/cgn2\_6/ptodata/2/paa/USO7\_NEW\_COMB.pep:\*
/cgn2\_6/ptodata/2/paa/USO7\_NEW\_COMB.pep:\*
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/cgn2\_6/ptodata/2/paa/USO9\_NEW\_COMB.pep:\*
/cgn2\_6/ptodata/2/paa/USO9\_NEW\_COMB.pep:\*
/cgn2\_6/ptodata/2/paa/USO9\_NEW\_COMB.pep:\* /cgn2\_6/ptodata/2/paa/US10\_NEW\_COMB.pep:\* /cgn2\_6/ptodata/2/paa/US10\_NEW\_COMB.pep4:\* /cgn2\_6/ptodata/2/paa/US60\_NEW\_COMB.pep4:\* /cgn2\_6/ptodata/2/paa/US60\_NEW\_COMB.pepe;

Pending\_Patents\_AA\_New:\*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

		æ				
Result	Score	Query	Tenath DR	g	E	Doscription
	) :					20132113202
1	489	100.0	93	~	PCT-US02-35606-109	Sequence 109, App
7	489	100.0	93	7	PCT-US02-35606-146	146,
e	489	100.0	93	7	PCT-US02-40891-473	473,
4	489	100.0	93	~	PCT-US02-40891-549	549
ß	489	100.0	93	7	PCT-US02-40891-638	638,
9	489	100.0	93	7	PCT-US02-40891-639	639
7	489	100.0	93	0	PCT-US02-40891-640	640,
æ	489	100.0	93	N	PCT-US02-4:0891-641	
6	489	100.0	93	12	US-10-314-410-2	Sequence 2, Appli
10	489	100.0	93	12	US-10-405-027-5105	Sequence 5105, Ap
11	489	100.0	93	12	US-10-445-790-2	
12	489	100.0	93	14	US-60-453-135-8659	Sequence 8659, Ap
13	489	100.0	93	14	US-60-453-050-8659	Sequence 8659, Ap
14	489	100.0	93	14	US-60-455-444-4765	Sequence 4765, Ap
15	489	100.0	93	14	US-60-465-241-4765	Sequence 4765, Ap
16	489	100.0	93	14	US-60-466-412-8659	Sequence 8659, Ap
17	484	0.66	93	12	US-10-285-572-2	Sequence 2, Appli
18	484	0.66	93	12	US-10-137-438A-2	Sequence 2, Appli
19	484	0.66	. 93	12	US-10-406-494-2	7

Sequence 333, Apples Sequence 2, Appli Sequence 53, Appli Sequence 50, Appli Sequence 257, Appli Sequence 257, Appli Sequence 423, Appli Sequence 425, Appli Sequence 7, Appli Sequence 7, Appli Sequence 561, Appli Sequence 51, Appli Sequence 561, Appli Appli Sequence 561, Appli Sequence	
PCT-USO2-40891-333 US-10-341-931-2 US-10-341-931-2 US-10-335-394-49 US-10-335-394-50 PCT-USO2-40891-422 PCT-USO2-40891-423 PCT-USO2-40891-423 PCT-USO2-40891-423 PCT-USO2-40891-425 US-09-839-445-7 US-09-839-445-7 US-10-001-221A-7 US-10-001-221A-7 US-10-001-221A-7 PCT-USO2-40891-562 PCT-USO2-40891-564 PCT-USO2-40891-566	
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3866 3866 3866 3806 3006 3006 3105 3105 3105 3105 3105 3105 3105 3105	159
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1 MARLQTALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 93;
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                                                                                            APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: 41 Human Secreted Proteins
FILE REFERENCE: PS/40PCT
CURRENT APPLICATION NUMBER: PCT/US02/35606
CURRENT FILING DATE: 2002-11-06
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 160
SOFTWARE: PAtentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: 41 Human Secreted Proteins
FILE REFERENCE: PS740CPT
CURRENT APPLICATION NUMBER: PCT/US02/35606
CURRENT FILING DATE: 2002-11-06
PRIOR APPLICATION NUMBER: 60/331,046
                                              Sequence 109, Application PC/TUS0235606 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 146, Application PC/TUS0235606 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens
PCT-US02-35606-109
RESULT 1
PCT-US02-35606-109
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PCT-US02-35606-146
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RESULT 4
PCT-US02-40891-549
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llarity 100.0%; Pred. No. 4.7e-52;
Conservative 0; Mismatches 0;
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TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF64PCT
CURRENT PEPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR PILING DATE: 2001-2-28
PRIOR PILING DATE: 2002-02-8
PRIOR PILING DATE: 2002-02-8
PRIOR PILING DATE: 2002-03-8
PRIOR APPLICATION NUMBER: 60/389,008
PRIOR PILING DATE: 2002-07-14
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR PILING DATE: 2002-09-18
PRIOR PILING DATE: 2002-09-18
PRIOR PILING DATE: 2002-10-02
PRIOR PELING DATE: 2002-10-11
PRIOR PPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-11
PRIOR PPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/412,613
PRIOR PILING DATE: 2002-10-13
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
PRIOR PILING DATE: 2002-11-05
PRIOR APPLICATION NUMBER: 60/433,360
PRIOR FILING DATE: 2002-11-05
PRIOR PILING DATE: 2002-11-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 473, Application PC/TUS0240891 GENERAL INFORMATION:
PRIOR FILING DATE: 2001-11-07
                           NUMBER OF SEQ ID NOS: 160
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 146
LENGTH: 93
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Best Local Similarity 100.0
Matches 93; Conservative
                                                                                                                                                           CT-US02-35606-146
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PCT-US02-40891-473
                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 93; Conserv
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ORGANISM:
                                                                                                                                     TYPE: PRT
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CURRENT PILING DATE: 2002-12-23
PRIOR FILING DATE: 2001-12-21
PRIOR PLILING DATE: 2001-12-21
PRIOR PLILING DATE: 2001-12-21
PRIOR PLICATION NUMBER: 60/348,950
PRIOR PLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-05-30
PRIOR FILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-07-24
PRIOR FILING DATE: 2002-07-24
PRIOR FILING DATE: 2002-09-18
PRIOR FILING DATE: 2002-10-10
PRIOR PLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-11
PRIOR PLICATION NUMBER: 60/417,611
PRIOR PLICATION NUMBER: 60/417,611
PRIOR PLILING DATE: 2002-10-11
PRIOR PLILING DATE: 2002-10-12
PRIOR PLILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR PRIOR PLICATION NUMBER: 60/43,63
PRIOR FILING DATE: 2002-11-05
PRIOR PRIOR FILING DATE: 2002-11-05
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PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR PRIOR FILING DATE: 2002-11-05
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100.0%; Pred. No. 4.7e-52;
iive 0; Mismatches 0;
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Sequence 638, Application PC/TUS0240891
GENERAL INFORMATION:
TITLE OF INVENTION:
FILE REFERENCE: PF564PCT
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/378,908
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR PELLING DATE: 2002-09-18
PRIOR PELLING DATE: 2002-09-18
PRIOR FILING DATE: 2002-10-02
PRIOR FILING DATE: 2002-10-02
                                                                                        APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
Sequence 549, Application PC/TUS0240891 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Ver. 2.0
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PCT-US02-40891-549
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Best Local Similarity
Matches 93; Conserv
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1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
PRIOR PILING DATE: 2001-12-23
PRIOR PILING DATE: 2001-12-61
PRIOR PELICATION NUMBER: 60/341,811
PRIOR PPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2002-05-10
PRIOR PELICATION NUMBER: 60/411,355
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR PILING DATE: 2002-10-11
PRIOR PELING DATE: 2002-10-23
PRIOR PELING DATE: 2002-10-23
PRIOR PELING DATE: 2002-10-23
PRIOR PELING DATE: 2002-10-23
PRIOR PELING DATE: 2002-11-28
PRIOR PELING DATE: 2002-11-28
PRIOR PELING DATE: 2002-11-28
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PRIOR PILING DATE: 2002-11-28
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Pred. No. 4.7e-52;
                                                                                               61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSO 93
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                                                               61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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FILE REFERENCE: PF54PCT
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
PRIOR PEPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2002-02-88
PRIOR FILING DATE: 2002-02-88
PRIOR FILING DATE: 2002-02-88
PRIOR FILING DATE: 2002-05-10
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100.0%; Pred. No. 4.7
tive 0; Mismatches
                                                                                                                                                                                                                                                                          Sequence 640, Application PC/TUS0240891
GENERAL INFORMATION:
PPPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
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PCT-US02-40891-641
; Sequence 641, Application PC/TUS0240891
; GENERAL INFORMATION:
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Best Local Similarity 100.0
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PCT-US02-40891-640
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         PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR PILING DATE: 2002-11-05
PRIOR PLILING DATE: 2002-11-05
PRIOR PLILING DATE: 2002-01-28
PRIOR PLILING DATE: 2002-01-28
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 2222
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 638
LENGTH: 93
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Pred. No. 4.7e-52;
Mismatches 0;
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TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
PRIOR PELING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-02-18
PRIOR FILING DATE: 2002-07-24
PRIOR PAPLICATION NUMBER: 60/411,355
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR APPLICATION NUMBER: 60/411,356
PRIOR APPLICATION NUMBER: 60/411,984
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR PILING DATE: 2002-10-11
PRIOR PILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/412,611
PRIOR PILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-11-01
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PRIOR FILING DATE: 2002-01-28
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Best Local Similarity 100.0%; P.
Matches 93; Conservative 0;
PRIOR FILING DATE: 2002-10-11
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SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 639
                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-638
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PCT-US02-40891-639
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; ORGANISM: Homo sapiens
US-10-405-027-5105
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; ORGANISM: Homo sapiens
US-10-445-790-2
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LENGTH: 93
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Sequence 2, Application US/10314410

GENERAL INFORMATION:
APPLICANT: Holtzman, Douglas A.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
TITLE OF INVENTION: NOVEE GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES
FILE REFREENCE: 07344-24401

CURRENT APPLICATION NUMBER: US/09/811,088

PRIOR APPLICATION NUMBER: US/09/811,088

PRIOR FILING DATE: 2000-103-16

PRIOR FILING DATE: 2000-103-16

PRIOR FILING DATE: 1907-03-12

PRIOR FILING DATE: 1907-04-16

PRIOR PELICATION NUMBER: US 08/757,421

PRIOR PELICATION NUMBER: US 08/43,651

PRIOR FILING DATE: 1997-04-16

PRIOR PRILING DATE: 1997-04-16
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PRIOR FILING DATE: 2002-07-35,000
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR PELING DATE: 2002-10-02
PRIOR PELING DATE: 2002-10-02
PRIOR PELING DATE: 2002-10-03
PRIOR FILING DATE: 2002-10-03
PRIOR FILING DATE: 2002-10-13
PRIOR PELING DATE: 2002-10-03
PRIOR PELING DATE: 2002-10-03
PRIOR PELING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-01-28
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 2222
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 641
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100.0%; Score 489; DB 2;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0;
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SOFTWARE: FastSEQ for Windows Version 4.0
PRIOR APPLICATION NUMBER: 60/398,008
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PCT-US02-40891-641
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APPLICANT: Device, Anthony L. APPLICANT: Device, Anthony L. APPLICANT: Garzino, Alfedo TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination CURRENT APPLICATION NUMBER: US/10/445,790 CURRENT FILING DATE: 2003-05-27 PRIOR APPLICATION NUMBER: PCT/US98/26291 PRIOR FILING DATE: 1909-12-11 PRIOR FILING DATE: 2000-12-06 PRIOR FILING DATE: 2000-12-06 PRIOR FILING DATE: 2000-0-12-06 PRIOR FILING DATE: 2000-0-12-06 PRIOR FILING DATE: 2000-0-12-06 PRIOR FILING DATE: 1900-0-12-06 PRIOR FILING PRIOR FILI
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ch 100.0%; Score 489; DB 12; Smilarity 100.0%; Pred. No. 4.7e-52; 93; Conservative 0; Mismatches 0;
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TITLE OF INVENTION: Human Secreted Proteins
FILE REFERENCE: PS006P1
CURRENT APPLICATION NUMBER: US/10/405,027
CURRENT FILING DATE: 2003-04-07
PRIOR FILING DATE: 2002-04-04
PRIOR FILING DATE: 2002-04-04
PRIOR FILING DATE: 2002-04-04
PRIOR FILING DATE: 2002-04-30
NUMBER OF SEO ID NOS: 5810
SOFTWARE: PATENTIN UN VET: 2.0
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SOFTWARE: PatentIn version 3.1
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61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ

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; Sequence 4765, Application US/60455444; GENERAL INFORMATION:
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APPLICANT: CARGILL, Michele
APPLICANT: TAKOUBOVA, 01ga
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: MYCCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001456
CURRENT APPLICATION NUMBER: US/60/453,135
CURRENT FILING DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
SOFTWARE: FastSEQ for Windows Version 4.0
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APPLICANT: CARGILL,
APPLICANT: LUKE, May
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001457
CURRENT APPLICATION NUMBER: US/60/453,050
CURRENT FILIENG DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
SOFTWARE: FRRISEQ for Windows Version 4.0
SEQ ID NO 8659
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Query Match
100.0%; Score 489; DB 12;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0;
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100.0%; Score 489; DB 14;
Best Local Similarity 100.0%; Pred. No. 4.7e-52;
Matches 93; Conservative 0; Mismatches 0;
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ilarity 100.0%; Pred. No. 4.7e-52;
Conservative 0; Mismatches 0;
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US-60-453-050-8659
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US-60-453-135-8659
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ses 93; Conserv
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LENGTH: 93
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APPLICANT: CARGILL, Michele
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: THEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLO01455
CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
NUMBER OF SEQ ID NOS: 50986
SOFTWARE: FASTERO for Windows Version 4.0
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TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETE
FILE REFERENCE: CLO01468
CURRENT APPLICATION NUMBER: US/60/465,241
CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 258418
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 489; DB 14; Best Local Similarity 100.0%; Pred. No. 4.7e-52; Matches 93; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 489; DB 14; 100.0%; Pred. No. 4.7e-52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93
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Job time : 34.8235 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 4765, Application US/60465241; GENERAL INFORMATION: APPLICANT: CARGILL, Michele
                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                      93; Conservative
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-60-465-241-4765
                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens
US-60-455-444-4765
                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                            SEQ ID NO 4765
LENGTH: 93
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

July 28, 2003, 03:58:03 ; Search time 4.88445 Seconds (without alignments) 789.709 Million cell updates/sec Run on:

US-09-509-165A-2 489 1 MARLQTALLVVLVALLAVALQ......EICADPRVPWVKMILNKLSQ 93 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

112892 seqs, 41476328 residues Searched:

112892 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

SwissProt\_40:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	000626 homo sapien	mus m	g	h smal	P50229 rattus norv	P13501 homo sapien	mus n	P10855 mus musculu	P50231 rattus norv		P97272 cavia porce			P13236 h small ind	homo	homo	bos t	098157 kaposi's sa	mus m	P80075 homo sapien	cavia	рошо	P80098 homo sapien	homo	homod	Q99731 homo sapien		P46632 oryctolagus	O70460 mus musculu	P13500 homo sapien	P28291 bos taurus	nyn4 maca	P49873 sus scrofa
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SUMMARIES	ID	-	SY22_MOUSE	SY04_CHICK	SY18_HUMAN	SY03_RAT	SY05_HUMAN	SY05_MOUSE	SY03_MOUSE	SY05_RAT	SY12_MOUSE	SY05_CAVPO	SY14_HUMAN	SY04_RAT	SY04_HUMAN	SY03_HUMAN	SY3L_HUMAN	SY05_BOVIN	VMI2_KSHV	SY04_MOUSE	SY08_HUMAN	SY02_CAVPO	SY17_HUMAN	SY07_HUMAN	SY15_HUMAN	SY13_HUMAN	SY19_HUMAN	REG1_BOVIN	SY04_RABIT	SY19_MOUSE	SY02_HUMAN	MCPA_BOVIN	SY02_MACFA	SY08_PIG
	DB	-	٦	٦	П	٦	7	7	7	-	7	-	Н	7	٦	П	7	-	_	Н	٦	П	-	П	-	7	<b>~</b>	7		_	-	7	Α,	-
	Length	93	92	90	88	92	91		92	92	104	91	93	92	92	92	93	91	94	92	66	120	94	66	113	98	86	70	92	108	66	66	66	ט ט
æ	Query	0	œ	N	2	31.9	_	30.1	30.0	30.0	29.6	6	28.8	28.7	28.3	27.8	27.8	27.7	27.4	27.3	26.8	26.6	26.3		25.8	25.3	24.7	24.2	24.2	4		23.7	23.7	7.67
	Score	489	334	160.5	159	156	151.5	147	4	146.5	144.5	142.5	•		138.5	136	13	٠	13	133.5	131	130	128.5	127.5	126	123.5	121	118.5	Н.	118.5	117	116	116	110
	Result No.	1	7	m	4	S	9	7	ω	σ	10	11	12	13	14	15	16	17	18	19	50	21	22	23	24	25	56	27	28	53	30	31	32	2

	Q9jkc0 mus musculu O00175 homo sapien P14844 rattus norv				
SY02_CANFA EOTA_HUMAN	SY24_MOUSE SY24_HUMAN SY02_RAT	SY20_MOUSE SY08_MOUSE	SY26_HUMAN SY08_BOVIN	SY21_HUMAN	SY02_PIG
п п		пп			п
101	119 119 148	97	94 99	134	66
23.5	23.1 22.9 22.9	22.7	22.0 21.9	21.9	21.5
115	113 112 112	111 109.5	107.5	105.5	105
34 35	36 37 38	39 40	41	<b>4</b> 4	4.5

## ALIGNMENTS

1	SY22_HUMAN								
	SY22_HUMAN	STANDARD;	ξĎ;	PRT;	93 A	AA.			
	000626;								
DT 15	15-JUL-1999	(Rel. 38,	Created)	00000	4	-			
	-JUN-2002	(Rel. 30,	Last set	dence up	ממכני	(a)			
	Small inducible cytokine A22 precursor (CCL22)	ble cytoki	ine A22 r	recursor	၂႘	1,22)	Macroph	(Macrophage-derived	eq
	emokine) (	Stimulated	1 T cell	chemotac	tic	prote	n 1) (C	chemotactic protein 1) (CC chemokine	ne
	STCP-1).	,	,						
	SCYA22 OR MD	OR MDC OR A-152E5.1.	2E5.1.						
	Homo sapiens (Human)	(Human)	•		:			,	
	Eukaryota; Metazoa; Chordata;	etazoa; Ci	ordata;	Craniata	. Ye	rtebra	ita; Eut	Craniata; Vertebrata; Euteleostomi;	
OC Mar	mmalla; Eu	theria; Pr	:Imates;	Catarrini; Hominidae; Homo.	.; u	HOMIN	.dae; но	Q	
	NCB1_14X1D=9000;	2000							
	SECTIENCE FROM N.A AND SECTIENCE OF	MNANAN	AD SECUEN		25-35				
	SSUE-Macro	phage;							
RX MEI	DLINE=9729	6313; Pub	4ed=91518						
	diska R.,	Chantry D.	., Raport		Sozzani	inf S.,	Allavena P	na P.,	
	Leviten D., Mantovani A., Gray P.W.;	Mantovani	A., Gray	P.W.;	į				
RT "HI	"Human macrophage-derived chemokine (MDC), a	phage-deri	Lved chem	okine (M	9		rel chem	novel chemoattractant	nt ror
	nocytes, m	onocy ce-as	ar roed de	SHOLLCIC	CET		and natural Aillei	LATILET	
	CELLS. ;	185:1595-	.16047199	171					
	1			:					
RP SE	SEQUENCE FROM N.A.	M N.A.							
	TISSUE-Macrophage;	phage;			•				
	MEDLINE=97460118; PubMed=9312138;	0118; Pub	4ed=93121	138;		•			
RA Chi	Chang MS., McNinch J., Elias C. III, Manthey C.L., Gross	McNinch	I., Elias	C. III,	Mar	they	III, Manthey C.L., Grosshans	shans	٥.,
	ng T., Boo	ne T., And	irew D.P.	., redo leov	4	4	characterisation of a nowel	Jul once	
	orecular c	timilated	T cell c	hemotact	ָ קיני ייני	roteir	STORY	+ c	
	erifically	מי מי מי מי מי מי מי מי מי	or trate	T Lymph	, ,		10.10		
	J. Biol. Chem. 272:25229-25237(1997).	m. 272:252	229-25237	(1997).					
	7								
	QUENCE FRO	M N.A.		•					
RX MEI	DLINE-9942	5270; Pub	4ed-10493	1829;					
	ftus B.J.,	Kim UJ.	., Sneddo	on V.P.,	Kalu	sh F.	Brando		
	hrmann J.,	Mason T.	Crosby	M.L., Ba	rnst	ead M	, Cron1	. r.,	
KA De	Slattes Ma	ys A., Cac	7 . , Au	K.A., KG	i G	1 L	Micchel		
	"Genome dunlications and other features in 12 Mh of DNA s	ications a	and other	feature	ξ÷	12 M	Of DNA	sequence from	from
	man chromo	some 16p a	and 16a.		i )				,
	Genomics 60:295-308(1999).	295-308(19	999).						
	_	•							
	SEQUENCE FROM N.A	M N.A.							
	TISSUE-Pancreas, and Spleen;	eas, and 5	spleen;						
	Strausberg R.;								
	Submitted (APR-2002)	PR-2002) t	to the EP	to the EMBL/GenBank/DDBJ databases	nk/I	DBJ de	tabases		
	_								
	RECEPTOR INTERACTION	ERACTION.	0.40						
	MEDLINE=98104168; Pubmed=9430/24;	Alba; Fubr	Med=9430		,	;			
	aı T., Cha	ntry D., I	Raport C			., N15	Wood C.L., Nishimura M	4., Godiska	ka R.
	Yoshie O., Gray P.W.;	rav P.w.							
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Query Match
Best Local Similarity
Matches 59; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92 AA;
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SY04_CHICK
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                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chemokine receptor 4.";
J. Biol. Chem. 273:1764-1768(1998).

-! Biol. Chem. 273:1764-1768(1998).

-! FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR

T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED

T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC
CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
                                                                                                  ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
BINDS TO CCR4.
SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH
MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
EXPRESSION IN SMALL HYPESTINE.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MARLQTALLVVLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-1999 (Rel. 38, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
(Activated B and dendritic cell-derived)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMALL INDUCIBLE CYTOKINE A22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        631FBE9CC083F787 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; DB 1;
3.1e-48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSTTE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
CYTOKine; Chemotaxis; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 489;
                                                                                                                                                                                                                                                                                                                                                                            EMBL; ACO04382; AAC24306.1; -. EMBL; BC027952; AAH27952.1; -. HSSP; Q98157; 1CM9. Genew; HGNC:10621; SCYA22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last seq
15-JUN-2002 (Rel. 41, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
100.0%;
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10580 MW;
                                                                                                                                                                                                                                                                                                                                                   EMBL; U83171; AAB58360.1; -. EMBL; U83239; AAB53372.1; -.
                                                                                                                                                                                                                      C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                               MIM; 602957
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088430;
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SIGNAL
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090826, 091029;
01-NOV-1997 (Rel. 35, Created)
115-JUN-2002 (Rel. 41, Last sequence update)
115-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 homolog precursor (Macrophage inflammatory protein 1-beta homolog).
                                                                                 1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
MEDLINE-98353531; Pubmed-9687523; Schaniel C., Pardall E., Sallusto F., Speletas M., Ruedl C., Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SMALL INDUCIBLE CYTOKINE A22.
BY SIMILARITY.
39859881CDAE07CA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG. Cytokine; Chemotaxis; Signal; Inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68.3%; Score 334; DB 1; 64.1%; Pred. No. 8.2e-31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          llarity 64.1%; Pred. No. 8.2e
Conservative 19; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 RKPGVVLITVKNRDICADPROVWVKKLLHKLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MGD; MGI:1306779; Scya22.
Interpro; IPR000827; CC_chemkine_sml.
Interpro; IPR001811; Chemokine_ILB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AF052505; AAC40200.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10302 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1
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sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                    databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Figdor C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      naive T
  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute on there are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPR 62
            MEDLINE-95369710; PubMed-7642115; Petrenko O., Ischenko I., Enrletto P.J.; Petrenko O. Ischenko I., Enrletto P.J.; Isolation of a CDNA encoding a novel chicken chemokine homologous to mammalian macrophage inflammatory protein-1 beta.";
                                                                                                                                                                                                            SUBUNIT: HOWODIMER (BY SIMILARITY).
SUBCELLULAR LOCATION: Secreted.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chemokine) (CC chemokine PARC) (Alternative macrophage activation-associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                       Hughes S.M., Bumstead N.; "Mapping of the gene encoding the chicken homologue of the mammalian chemokine SCYA4.";
                                                                                                                                                             Petrenko O., Enrietto P.J.;
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1997 (Rel. 35, Last sequence update)
15-UUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine Al8 precursor (CCLI8) (Macrophage
inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
chemokine) (CC chemokine PARC) (Alternative macrophage activation-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE A4 HOMOLOG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34; Indels
                                                                                                                               Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
SMALL INDUCIBLE CYTOKINE
BY SIMILARITY.
BY SIMILARITY.
M -> L (IN REF. 1).
50AF9679A267408F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Score 160.5; DB 1
; Pred. No. 2.6e-11;
18; Mismatches 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    89 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 PGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Signal.
                                                                                                                                                                                                                                                                                                                                                                                     HSSP; P13236; 1HUM.
InterPro: IPR000827; CC_chemkine_sml.
InterPro: IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1997 (Rel. 35, Created)
                                                                                                                                                                                                                                                                                                                                                               EMBL; L34553; AAA48747.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       32.8%;
38.2%;
                                                                                                                                                                                                                                                                                                                                                                             EMBL; AJ243034; CAB45103.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9987 MW;
                                                                                                                                                     SEQUENCE OF 14-90 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                         Gene 160:305-306(1995).
                                                                                                                                                                                                   (BY SIMILARITY)
TISSUE=Bone marrow;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SY18_HUMAN
P55774;
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Best Local
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TISSUE=Aorta, and Lung;
MEDLINE=97376836 pubMed=9233607;
Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
Nakagawa T., Tauruta J., Takeya M., Sakaki Y., Takatsuki K.,
Miura R., Opdenakker G., van Damme J., Yoshie O., Nomiyama H.;
Miura R., Opdenakker G., van Damme J., Yoshie O., Nomiyama H.;
Miura R., Opdenakker G., van Damme J., Yoshie O., Nomiyama H.;
macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for J. Imphocytes, but not for monocytes.";
J. Immunol. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POLITZ O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.;
"The genomic locus for the AMAC-1 gene contains possible pseudo-exons within the first intron sequence.";
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES, HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDILINE-97275308; PubMed-9129202;
Wells T.N.C., Peitsch M.C.;
"The chemokine information source: identification and characterization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SECUENCE FROM N.A.
MEDLINE=99168908; PubMed=10049593;
Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
Hughes A.L., Nomiyama H.;
"Chemokine PARC gene (SCYA18) generated by fusion of two
MIP-lalpha/LD78alpha-like genes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kodelja V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerdt S.; "Alternative macrophage activation-associated CC-chemokine-1, a novel structural homologue of macrophage inflammatory protein-1 alpha with a Th2-associated expression pattern."; Immunol. 160:1411-1418(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       novel chemokines using the WorldWideWeb and expressed sequence tag
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Genomic organization and biological characterization of the novel human CC chemokine DC-CK-1/PARC/MIP-4/SCIA18."; Genomics 56:296-302(1999).
Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H., Neote K., McColl S.R.;
                                      Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Chordata; Craniata; Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
                                                                                                                                                                                                                                           protein-3 and -4.";
                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
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MEDLINE-99189237; PubMed=10087196;
                                                                                                                                                                                                                                                                                      02-APR-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. Leukoc. Biol. 61:545-550(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Dendritic cell;
MEDLINE-97336102; PubMed-9192897;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-98230488; PubMed-9570561;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     naive T cells.";
Nature 387:713-717(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genomics 55:353-357(1999)
                                                                                                                                                                                                    Li H., Ruben S.;
"Macrophage inflammatory
Patent number US5504003,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISCUSSION OF SEQUENCE.
    Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                 WCBI_TaxID=9606;
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SEQUENCE FROM N.A
 NCBI_TaxID=10116;
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                    -1- SUBCELLULAR LOCATION: Secreted.
-1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES, PLACENTA, BONE MARNOW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS AND T-CELL AREAS OF SECONDAR LYMPHOID ORGANS AND MACROPHAGES
DERIVED FROM PERIPHERAL BLOOD MONOCYTE: NOT EXPRESSED BY PERIPHERAL BLOOD MONOCYTE: NOT EXPRESSED BY PERIPHERAL BLOOD MONOCYTE: TO-MACROPHAGE
DIFFERENTIATION IS A PREMEDULY EVENESSION.
-1- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND IL-10. EXPRESSION IS INHIBITED BY IN-CAMAN WHILE GLOCOCORTICOIDS EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING MONOCYTIC U937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC) (CHEMOKINE CC).
                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licensee1sb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Small inducible Cytokine A3 precursor (CCL3) (Macrophage inflammatory SCYA3 OR MIPLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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9
 THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMALL INDUCIBLE CYTOKINE A18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY.
BY SIMILARITY.
C287B94B9C0518E4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMARY; SM0199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Inflammatory response; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.8e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Pred. No. 3.8e
18; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 PRPGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             32.5%; Score 159; 36.3%; Pred. No. 3.
                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
                                                                                                                                                                                                                                                                                                                               EMBL, AR012113, BAA34368 1;
EMBL, AF08214, AA32287 1;
EMBL, AF082212; AAC32287 1;
EMBL, AF082213; AAC32287 1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                        EMBL; AB000221; BAA21670.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                EMBL; AF111198; AAD30390.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89 AA; 9849 MW;
                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P13236; 1HUM.
Genew; HGNC:10616; SCYA18.
                                                                                                                                                                                                                                                                                                                      13710; CAA74039.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00048; IL8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                     MIM; 603757
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P50229;
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Makagawa H., Shiota S., Takano K., Shibata F., Kato H.;
Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
Nakagawa H., Shiota S., Takano K., Shibata J., Shibata J., Shimbar C., Shimbar S., Shimbar S., Shibata J., Shiba
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SUBCELLULAR LOCATION: Secreted.
-!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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STRAIN=CD-1; TISSUE-Lung;
MEDLINE-95298037; PubMed=7779098;
Shi M.M., Godleski J.J., Paulauskis J.D.;
Molecular cloning and posttranscriptional regulation of macrophage
"Molecular cloning and posttranscriptional regulation of macrophage
Inflammatory protein-1 alpha in alveolar macrophages.";
Biochem. Biophys. Res. Commun. 211:289-295(1995).
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PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Inflammatory respo
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InterPro; IPR001811; Chemokine_ILB.
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MEDLINE-95238980; PubMed-7722328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acute lung injury in rats.";
J. Immunol. 154:4793-4802(1995).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'A human T cell-specific molecule is a member of a new gene family."; J. Immunol. 141:1018-1025(1988).
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                                                                                                                                               pi3501; 043646; Q9NYA2;
01-3AN-1990 (Rel. 13, Created)
15-JUL-1999 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
SCRA5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."; Science 270:1811-1815(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O., "Organization of the chemokine gene cluster on human chromosome 17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC,
                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C.,
Davis M.M., Krensky A.M.;
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MEDLINE-99111238; PubMed-9889151;
Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H.,
Picard L., Wlodawer A., Lubkowski J., Kent S.B.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
Zeng Q.P., Yang R.Y., Fu L.C.;
"The complete sequence of human beta-chemokine RANTES mRNA.";
Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
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Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases
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MEDLINE=96106406; PubMed=8525373;
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                                                                                                                                  91 AA.
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60 PGVIFLTKRNRQICADPKETWVQEYITEL
                                                                                                                                  PRT;
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MEDLINE=95244456; PubMed=7537088;
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MEDLINE-88285659; PubMed-2456327;
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                                                                                                                               STANDARD;
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-!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS. BINDS TO CCR1, CCR3, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANY RANTES PROTEIN INDUCES A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV). 6 TALLVVLVLLAVALQA-TEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPG -!- INDUCTION: BY MITOGENS. -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE Gaps Proudfoot A.E.I., Wells T.N.C., ubkowski J.; The crystal structure of Met-RANTES: comparison with native RANTES "Total chemical synthesis and high-resolution crystal structure the potent anti-HIV protein AOP-RANTES."; Chem. Biol. 6:43-51(1999). <u>ښ</u> PROSITE; PS00472; SMALL\_CYTOKINES\_CC; 1. Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response; Score 151.5; DB 1; Length 91; Pred. No. 2.7e-10; Indels -1- SUBCELLULAR LOCATION: Secreted. -1- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC. A -> R (IN REF. 1 AND 4). A -> V (IN REF. 4). SMALL INDUCIBLE CYTOKINE FBOBFAF9A87C620F CRC64; Mismatches 88 65 VVLLTFRDKEICADPRVPWVKMILNKL 91 K-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS) || :| ::::||:| || || VFVTRKNRQVCANPEKKWVREYINSL Hoover D.M., Shaw J., Gryczynski Z., interPro; IPR000827; CC\_chemkine\_sml. Chemokine\_IL8 22; AF043341; AAC03541.1; -. AF088219; AAC63331.1; -. AF266753; AAF73070.1; -. BC008600; AAH08600.1; -. EMBL; M21121; AAA36725.1; -. 31.0%; 9990 MM; PDB; 1EQT; 19-APR-00. Senew; HGNC:10632; SCYA5. Conservative C-C) (CHEMOKINE CC) Pfam; PF00048; IL8; 1. 1HRJ; 14-OCT-96 1RTN; 03-JUN-95 03-JUN-95 23-APR-99 IPR001811; PIR; A28815; A28815 Similarity 91 AA; and AOP-RANTES. MIM; 187011; 3D-structure 29; Lubkowski J 1B3A; 1RTO; CONFLICT Query Match Best Local 9 nterPro DISULFID DISULFID SEQUENCE SIGNAL SMART;

RESULT 7

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91 AA;
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SY03_MOUSE
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                                                                                                                                                                                                                                                                                                                                                               MEDINE-92277990; PubMed-1375672;
Heeger P., Wolf G., Meyers C., Sun M.J.; O'Farrell S.C.,
Krensky A.M., Neilson E.G.;
"Isolation and characterization of cDNA from renal tubular epithelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -i- SUBCELLULAR LOCATION: Secreted.
-i- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SWALL CYTOKINE
                                                                                            01-JUN-1994 (Rel. 29, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
protein) (SIS-delta) (MuRantes).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-NIH Swiss;
MEDLINE=94132613; PubMed=7507961;
Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
"Cloning, genomic organization, and chromosomal localization of the
ScyaS gene encoding the murine chemokine RANTES.";
J. Immunol. 152:1182-1189(1994).
                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-94217689; PubMed-7513046;
Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
Paznekas W.A.;
"Definition of a lipopolysaccharide-responsive element in the 5'-
flanking regions of MuRantes and crg-2.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schall T.J., Simpson N.J., Mak J.Y.; "Moleular Cloning and expression of the murine RANTES cytokine: structural and functional conservation between mouse and man."; Eur. J. Immunol. 22:1477-1481(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-BALB/CJ.B10.S/J, NOD/LTJ, and SJL/J; TISSUE-Spleen;
STRAIN-BALB/CJ.B10.S/J, NOD/LTJ, and SJL/J; TISSUE-Spleen;
MA R.Z., Teuscher C.;
Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
-I- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T
CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE I
BASOPHILS AND ACTIVATES EOSINOPHILS.

BASOPHILS AND ACTIVATES EOSINOPHILS.
                       91 AA.
                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE-92289805; Pubmed=1376260;
                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ng murine Rantes.";
Int. 41:220-225(1992).
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                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C-C) (CHEMOKINE CC).
                                                                       26,
                                                                                                                                                                                                                    Mus musculus (Mouse).
                                                                       (Rel.
                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                     01-JUL-1993
                 SY05_MOUSE
P30882;
                                                                                         01-JUN-1994
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SY05_MOUSE
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AF065944; AAC17511.1; -. AF065945; AAC17512.1; -. AF065946; AAC17513.1; -.

EMBL; EMBL;

EMBL;

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3 RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPR 62
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P10855; P14096;
01-JUL-1989 (Rel. 11, Created)
01-JUL-1980 (Rel. 14, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (TY-5) (SIS-alpha) (Heparin-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermsen K., Luedke C., Gallegos C., Coit D., Merryweather J., Cerami A.;
J. Exp. Med. 170:2189-2189(1989).
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Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
A family of small inducible proteins secreted by leukocytes are
members of a new superfamily that includes leukocyte and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
6
EMBL; AF065947; AAC17514.1; -.
HSSP; P13501; IRTN.
MGD; MGI:98262; Scys2 CC_chemkine_sml.
InterPro: IPR000827; CC_chemkine_ILB.
InterPro: IPR001811; Chemokine_ILB.
Pfan; PF000148; ILB; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYCCKine; Chemotaxis; T-cell; Signal; Inflammatory response.
SIGNAL
STGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               39; Indels
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A -> E (IN REF. 1).
5DFD66F4684FE1C8 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 147; DB 1;
Pred. No. 8.7e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30.1%; Scott No. co. 31.5%; Pred. No. co. ... 20; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY
BY SIMILARITY
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MEDLINE-91016858; Pubmed-2216738;
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Best Local Similarity 31.5-
Best Local Similarity 31.5-
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wolpe S.D., Davatelis G., Sherry B., Beutler B., Hesse D.G.,
Nguyen H.T., Moldawer L.L., Nathan C.F., Lowry S.F., Cerami A.;
"Macrophages secrete a novel heparin-binding protein with
inflammatory and neutrophil chemokinetic properties.";
J. Exp. Med. 167:570-581(1988).
-!- FUNCTION: MONGKINE WITH INFLAMMATORY, PYROGENIC AND CHEMOKINETIC
PROPERTIES. HAS A POPERT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
                                                                                                                                                                                                                                                      "Genomic structure of murine macrophage inflammatory protein-1 alpha and conservation of potential regulatory sequences with a human homolog, LD78.";
                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. STRAIN-BALB/CJ, DBA/2J, NOD/LLJ, SJL/J, and B10.S/J; TISSUE-Spleen; STRAIN-BALB/CJ, DBA/2J, NOD/LLJ, SJL/J, and B10.S/J; TISSUE-Spleen; Ma R.Z., Teuscher C.; Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
'Sequence of the murine haemopoietic stem cell inhibitor/macrophage
                                                                                                                                                                                                    MEDLINE-91237116; PubMed-2033269;
Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
Cerami A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMALL INDUCIBLE CYTOKINE A3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chemotaxis; Inflammatory response; Signal.
                                                                     SEQUENCE FROM N.A.
MEDLINE-89184547; Pubmed-2784565;
Kwon B.S., Welsbrann S.M.;
"CDNA sequences of two inducible T-cell genes.";
Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfan; PF00048; ILB; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC;
                 inflammatory protein 1 alpha gene.";
Nucleic Acids Res. 18:5561-5561(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MGD; MGI:98260; SCya3.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
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EMBL, X53372, CAA37452.1;
EMBL, J04491, AAA40304.1;
EMBL, M73061, AAA40307.1;
EMBL, AF065939, AAC17506.1;
EMBL, AF065940; AAC17507.1;
EMBL, AF065941; AAC17507.1;
EMBL, AF065941; AAC17509.1;
EMBL, AF065941; AAC17509.1;
                                                                                                                                                                                                                                                                                                                  Immunol. 146:4031-4040(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; M23447; AAA40146.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C-C) (CHEMOKINE CC).
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PIR; A30552; A30552.
PIR; A32393; A32393.
PIR; S04533; S04533.
PIR; S11685; S11685.
                                                                                                                                                                                 SEQUENCE FROM N.A.
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                                                                                                                                                             6 TALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGV 65
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                                                                                                                                                                                             6 TALAVLLCTMTLCNOVFSA-PYGAD-TPTACCFSYSR-KIPRQFIVDYFETSSLCSQPGV 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -1- SUBCELLULAR LOCATION: Secreted.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                        01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=Long Evans; TISSUE=Lung;
Jones M.L., Shanley T.P., Ward P.A.;
Submitted (FEB-194) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOATTRATANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASORHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF00048; IL8; 1.
SMART; SMO199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYtokine; Chemotaxis; T-cell; Signal; Inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30.0%; Score 146.5; DB 1; Length 92; 33.3%; Pred. No. 1e-09; ative 21; Mismatches 36; Indels
                                                                                             Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              POTENTIAL.
SMALL INDUCIBLE CYTOKINE A5.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                               Indels
                                                                 8BFF2DE7C6DEDD38 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B4FBEC2B4208ABC6 CRC64;
BY SIMILARITY.

BY SIMILARITY.

F -> L (IN REF. 3).

V -> A (IN REF. 3).
                                                                                             Score 146.5; DB 1;
Pred. No. 1e-09;
19; Mismatches 32;
                                                                                                                                                                                                                                               : || |:::|||| : ||| : || 63 IFLTKRNRQICADSKETWVQEYITDL 88
                                                                                                                                                                                                                             66 VLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92 AA; 10170 MW;
                                                                 10345 MW;
                                                                             30.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; U06436; AAA96499.1; -.
                                                                                                              37.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30; Conservative
                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                          protein) (SIS-delta).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
 34
35
22
62
92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HSSP; P13501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHAIN
DISULFID
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CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                          SY05_RAT
P50231;
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SEQUENCE
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Best Local 3
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8 ò g RESULT 10

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 RLQTALLVVLVLLLAVALQATEAGPYGANMEDSV----CCRDYVRYRLPLRVVKHF-YWT 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SYOS_CAVPO STANDARD; PRT; 91 AA.
P97.272; 009076;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QTFILEPSCLG -> RT (IN STRAIN SJL/J).
8D102F4FF4CC3DBF CRC64;
                                                                                                                                                                                      InterPro, InterP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Campbell E.M., Proudfoot A.E.I., Yoshimura T., Allet B., Wells T.N.C., White A.M., Westwick J., Watson M.L.; Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 29.6%; Score 144.5; DB 1; Best Local Similarity 35.1%; Pred. No. 1.9e-09; Matches 34; Conservative 19; Mismatches 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55 SSOCPREAVIERTILDKEICADPKEKWVKNSINHLDK 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Pred. No. 1.96
19; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cavia porcellus (Guinea pig).
AAF15385.1; -
AAF15386.1; -
AAF15387.1; -
AAF15388.1; -
                                                                                                                                  HSSP; P13500; 1DOL.
MGD; MGI:108224; Scyal2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [1]
SEQUENCE FROM N.A.
STRAIN=Dunkin-Hartley;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein) (SIS-delta).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10141;
                                  AF065936;
                                                                 AF065937;
                                                                                                       AF065938;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SY05_CAVPO
                                         EMBL:
                                                                        EMBL;
                                                                                                       EMBL;
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MEDLINE-99370037; PubMed-10438970;
Teuscher C. ., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W.,
Blankenhorn E.P.;
"Sequence polymorphisms in the chemokines Scyal (TCA-3), Scya2
(monocyte Chemoatractant protein (MCP)-1), and Scyal2 (WCP-5) are
candidates for eae7, a locus controlling susceptibility to monophasic
remitting/nonrelapsing experimental allergic encephalomyelitis.";
Jimmunol. 163:256-2266(1999).
Temitting/nonrelapsing experimental allergic encephalomyelitis.";
Jimmunol. 163:256-2266(1999).
TEUNCTION: CHEMORACIE RACIOR THAT ATTRACTS EOSINOPHILS, MONOCYTES,
AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE
CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC
INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
PIVOTAL ROLE DURING EARLY STRAGES OF ALLERGIC LUNG INFLAMMATION.
C-1- SUBBURTH: HOMODIMER (BY SIMILARITY).
TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,
BREAST, HERRT, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.
C-1- INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).
C-1- SUBLINARTY: BELLONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licenseeisb-sib.ch).
2 KISAAASLTVILVAAALCTPVPASPYGS--DTTPCCFAYLSLALPRAHVKEYFYTSSKCS 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDINE-97149438; Pubmed-8996246; Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.; Murine monocyte chemoatractant protein (MCP)-5: a novel CC chemokine that is a structural and functional homologue of human
                                                                                                                                                                                                                                                                                                                                                          15-JUN-2022 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine Al2 precursor (CCL12) (Monocyte chemotactic
protein 5) (MCP-5) (MCP-1 related chemokine).
SCYA12 OR MCP5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C., Wershil B.K., Gutierrez-Ramos J.C.;
Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation.";
J. Exp. Med. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                   104 AA
                                                                                                   60 NLAVVFVTRRNRQVCANPEKKWVQEYINYL 89
                                                                 62 RPGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE-97079149; PubMed-8920881;
                                                                                                                                                                                                                                                                                                                           062401; 090YD6;
01.NOY-1997 (Rel. 35, Created)
01.NOY-1997 (Rel. 35, Last sequ
15-JUN-2002 (Rel. 41, Last and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Exp. Med. 185:99-109(1997).
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EMBL; U66670; AAB49424.1; -.
EMBL; AF065934; AAF15384.1; -
                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CHEMOKINE CC).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                   SY12_MOUSE
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DAR REPARANTA DE PARTE DE PART

4

Gaps

13;

Length 104; Indels 54

93

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SY04_RAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7 ALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SY14_HUMAN STANDARD; PRT; 93 AA.
016627; 013954;
01-N0V-1997 (Rel. 35, Created)
01-N0V-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2014 (Rel. 41, Last annotation update)
16-JUN-2014 (Rel. 41, Last annotation update)
17-JUN-2014 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-Liver;

BEDLINE-98263352; PubMed-9600961;
Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
"HCC-2, a human chemokine: gene structure, expression pattern, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-Bone marrow;
MEDLINE-96136773; PubMed-8551235;
Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y.,
Kubbies M., Tomeczkowski J., Kirchhoff K., Raida M., Adermann K.,
Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,
Baggiolini M., Forssmann W.-G.;
"HCC-1, a novel chemokine from human plasma.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                             Inter...
Inter...
Inter...
Inter...
Inter...
Fam. PF00018; IL8; 1.
SMART; SM00199; SCY; 1.
SMART; SM00199; SCY; 1.
Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
SIGNAL 1 23 SPALL INDUCIBLE CYTOKINE A5.
SIGNAL 33 57 BY SIMILARITY.
The state of the sta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              biological activity.";
Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                             29.1%; Score 142.5; DB 1
32.9%; Pred. No. 2.8e-09;
iive 21; Mismatches 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-1, a novel chemokine from human plasma.";
Exp. Med. 183:295-299(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A., AND SEQUENCE OF 20-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67 LLTFRDKEICADPRVPWVKMILNKL 91
                             EMBL; AB002662; BAA19604.1; -.
HSSP, P13501; 1RTN
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB
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MEDLINE-99228475; PubMed-10213461;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
tes 28; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SY14_HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57
LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE
PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.

-!- SUBCELLULAR LOCATION: Secreted.

-!- ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;

-!- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL

TISSUES SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL

TISSUES SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE

MARROW, PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE

C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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BY SIMILARITY.
R -> QTGGKPKVVKIQLKLVG (IN ISOFORM HCC-
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STRAIN-Long Evans; TISSUE-Lung;
Jones M.L., Shanley T.P., Schmal H., Friedl H.P., Ward P.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Score 141; DB 1; Length 93;
; Pred. No. 4.2e-09;
24; Mismatches 38; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMALL INDUCIBLE CYTOKINE A14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DDDB899DC9148836 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. Cytokine; Signal; Alternative splicing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AF088219; AAC63329.1; -. EMBL; AF088219; AAF23982.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28.8%; 26.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; Z49270; CAA89264.1; -. EMBL; Z70292; CAA94307.1; -. EMBL; Z70293; CAA94309.1; -. EMBL; Z49269; CAA89263.1; -.
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Genew; HGNC:10612; SCYA14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 28.8 Best Local Similarity 26.3 Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10116;
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SEQUENCE FROM N.A.
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          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Gaps
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J. Immunol. 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Lipes M.A., Napolitano M., Jeang K.-T., Chang N.T., Leonard
"Identification, cloning, and characterization of an immune
activation gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Inflammatory response; Signal. *
BY SIMILARITY.
SMALL INDUCIBLE CYTOKINE A4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60B451EEEBC7103D CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        33.7%; Pred. No. 4.7e-09; ive 17; Mismatches 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 140.5;
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InterPro; IRR01811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
SMART; SM0199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Inflammatory respo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-89140347; PubMed-2521882;
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                                                                                                       C-C) (CHEMOKINE CC).
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les 30; Conserv
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Matches
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MEDLINE-89093958; PubMed-2521353;
Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
"A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
J. Immunol. 142:679-687(1989).
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BINDS TO CCR5 AND TO CCR8. ONE OF THE MAJOR HIV-SUPPRESSIVE
FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-BETA INDUCES A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Identification of the CC chemokines TARC and macrophage inflammatory protein.1 beta as novel functional ligands for the CCR8 receptor."; Eur. J. Immunol. 28:582-588(1998).
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Lodi P.J., Garrett D.S., Kuscewski J., Tsang M.L.S., Weatherbee J.A.,
Leonard W.J., Gronenborn A.M., Clore G.M.;
"High-resolution solution structure of the beta chemokine hMIP-1 beta
by multidimensional NMR.";
Science 263:1762-1767(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "The gene encoding the Act-2 cytokine. Genomic structure, HTLV-1/Tax responsiveness of 5' upstream sequences, and chromosomal localization.";
J. Biol. Chem. 266:17531-17536(1991).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Napolitano M., Modi W.S., Cevario S.J., Gnarra J.R., Seuanez H.N.,
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BEDLINE-2003852.2: PubMed-2809212;
Miller M.D., Hata S., Waal Malefyt R., Krangel M.S.;
"A novel polypeptide secreted by activated human T lymphocytes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            putative
structure on
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-99180363; PubMed-9521068; Bernardini G., Hedrick J., Sozzani S., Luini W., Spinetti G., Weiss M., Menon S., Zlotnik A., Mantovani A., Santoni A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
Birren B., Fasman K., McKernan K., Nusbaum C., Richardson
Lander E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chang H.C., Reinherz E.L.; Isolation and characterization of a CDNA encoding a cytokine which is induced by stimulation via the CD2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eur. J. Immunol. 19:1045-1051(1989).
                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE-91061800; Pubmed-2247088;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-89325421; PubMed-2568930;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-91373378; PubMed-1894635;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunol. 143:2907-2916(1989).
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Mol. Cell. Biol. 10:3646-3658(1990).
  83
                                                                PRT:
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MEDLINE=90287155; Pubmed=1694014;
                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
MEDLINE=86223879; Pubmed=3086300;
                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE=89140347; PubMed=2521882;
  61 PAVVFQTKRSKQVCADPSESWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                    . Immunol. 142:1582-1590(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cell proliferation.";
DNA Cell Biol. 9:589-602(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 23-92 FROM N.A.
                                                               STANDARD;
                                                                                                                                                                                        Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=96106406;
                                                                                                                                                                                                                                                                                                                                                                                                           secreted factors.
                                                                                                                                                                                                                            NCBI_TaxID=9606;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression.
                                                               SY03 HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Δ.
                                      RESULT 15
SY03_HUMAN
                                                                           P10147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lusso
                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modifited and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                   SUBCELLULAR LOCATION: Secreted.
INDUCTION: BY MITGGENS.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Gaps
  STRAINS OF HIV-1, HIV-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytokine; Chemotaxis; Inflammatory response; Signal; 3D-structure.
SIGNAL 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;; Score 138.5; DB 1; Length 92;
;; Pred. No. 7.9e-09;
15; Mismatches 38; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY.

BY SIMILARITY.

T -> C (IN REF. 7).

A -> S (IN REF. 6).

P -> L (IN REF. 2).

ARKLPR -> REASS (IN REF. 3).

S -> I (IN REF. 6).

S -> G (IN REF. 6).

S -> T (IN REF. 7 AND 8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMALL INDUCIBLE CYTOKINE A4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10212 MW; F2EA7CF341B0E258 CRC64;
DOSE-DEPENDENT INHIBITION OF DIFFERENT
             AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
InterPro; IPR001811; Chemokine_ILB.
SMART; SM00199; SCY: 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                   EMBL; AC003976; -; NOT_ANNOTATED_CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PGVVLLTFRDKEICADPRVPWVK 85
                                                                                                                                                                                                                         J04130; AAAS1576.1; -.
X53683; CAA37723.1; -.
X53682; CAA37722.2; ALT_SEQ.
                                                                                                                                                                                                                                                                                        EMBL; M69201; AAB00790.1; JOINED. EMBL; M69202; AAB00790.1; JOINED.
                                                                                                                                                                                                    EMBL; M23502; AAA36656.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28.3%;
34.9%;
                                                                                                                                                                                                                                                                                                                                        PIR; A31767; A31767.
PIR; B30574; B30574.
PIR; B30552; D30552.
PIR; A37411; A37411.
PDB; 1HUN; 30-APR: 94.
Genew; HGNC: 10630; SCYA4.
                                                                                                                                                                                                                                                                                                                                 AAA36752.1; -
                                                                                                                                                                                                                                                                  X16166; CAA34291.1;
                                                                                                                                                                                                                                                                              EMBL; M69203; AAB00790.1;
                                                                                                                                                                                                              AAA57256.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29; Conservative
                                                                         C-C) (CHEMOKINE CC).
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                 M57503;
                                                                                                                                                                                                                             EMBL; J04130;
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DISULFID
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SEQUENCE
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Hunter M.G., Bawden L., Brotherton D., Craig S., Cribbes S., Czaplewski L.G., Dexter T.M., Drummond A.H., Gearing A.H., Heyworth C.M., Lord B.I., Mccourt M., Varley P.G., Wood L.M., Edwards R.M., Lewis P.J.;
Bedwards R.M., Lewis P.J.;
1 alpha with improved pharmaceutical properties.";
Blood 86:4400-4408(1995).
                             01-MAR.1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
15-JUN-2020 (Rel. 41, Last annotation update)
15-JUN-2020 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (Tonsillar lymphocyte LD78 alpha protein) (GG/GI switch regulatory protein 19-1) (GGS19-1 protein)
(SIS-beta) (PAT 464.1).
SCYA3 OR GOS19-1 OR MIPlA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."; Science 270:1815(1995).
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
BINDS TO CCR1, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-ALPHA INDUCES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE-91103879; PubMed-2271120;
Blum S., Forsdyke R.E., Forsdyke D.R.;
"Three human homologs of a murine gene encoding an inhibitor of stem
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.; "Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors".
                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
                                                                                                                                                                                                                                                                                                                    Obaru K., Fukuda M., Maeda S., Shimada K.;
"A cDNA clone used to study mRNA inducible in human tonsillar
lymphocytes by a tumor promoter.";
Jymphocytes by a tumor promoter.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nakao M., Nomiyama H., Shimada K.; "Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 24-92, AND MUTAGENESIS OF ASP-49. MEDLINE-96127782; PubMed-8541527;
92 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-40 AND 71-83, AND FUNCTION.
06406; PubMed-8525373;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 RLQTALLVVLVLLAVALQATEAGPYGANM---EDSVCCRDYVRYRLPLRVVKHFYWTSDS 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
A. DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2,
                       AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV).
-!- SUBCELLULAR LOCATION: Secreted.
-!- INDUCTION: BY TPA OR PHA (TPA = 12-0-TETRADECANOYL PHORBOL-13
ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMALL INDUCIBLE CYTOKINE A3.
BY SIMILARITY.
BY SIMILARITY.
D->A: IN BB-10010; IMPROVED PHARMACEUTICAL PROPERTIES.
517865D506776CA8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 27.8%; Score 136; DB 1; Length 92
Best Local Similarity 31.5%; Pred. No. 1.5e-08;
Matches 29; Conservative 20; Mismatches 35; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Fram; PF00048; ILB.
FRAM; PR00199; SCY; 1.
FROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SYCKINE; Chemotaxis; Inflammatory response; Signal.
                                                                                                                                              MITOGEN)).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BE'
C-C) (CHEMOKINE CC). STRONG, TO SCYA3L1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60 CPRPGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92 AA; 10085 MW;
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; HGNC:10627; SCYA3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; D00044; BAA00029.1
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Search completed: July 28, 2003, 04:01:11 Job time : 5.88445 secs

| :|||: || | :::|||| || :::||
57 CSKPGVIFLTKRSRQVCADPSEEWVQKYVSDL 88

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:28 ; Search time 17.1933 Seconds (without alignments)
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Tour: July 28, 2003, 03:38:28 ; Search Lime 17.1933 Seconds (without alignments) (without alignments) 1114.528 Million cell updates/sec Lle: US-09-509-165A-2

Title: US-09-509-165A-2
Perfect score: 489
Sequence: 1 MARLQTALLIVVLVLLAVALQ.......EICADPRVFWVKMILNKLSQ

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5 Total number of hits satisfying chosen parameters: 671580

671580 segs, 206047115 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 200000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : SPTREMBL\_21:\*
1: Sp\_archea:\*
2: sp\_bacteria:\*
3: Sp\_fungi:\*
4: sp\_human:\*
5: sp\_lunvertebrate:\*
6: sp\_manmal:\*
7: sp\_mhc:\*
8: sp\_organelle:\*
9: sp\_phage:\*
10: sp\_varus:\*
11: sp\_rodent:\*
12: sp\_varus:\*
13: sp\_varus:\*
14: sp\_unclassified:\*
15: sp\_archepap:\*
16: sp\_archepap:\*
17: sp\_archepap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

		Description	Ogazuz mus musculu	091zh5 rattus norv	29qzul rattus norv	098158 kaposi's sa	pwa6 qallus qall	0910c9 gallus gall	qq57 qallus qall	1z10 sigmodon hi	1z65 sigmodon hi	18e0 gailus gall	440 felis silve	Q8sqa6 bos taurus	1z11 sigmodon hi	i68 homo sapien	095n01 canis famil	Contract and Security
KIES		Desc	060	091	060	360	160	091	080	091	091	091	0880	0880	091	0961	0956	ec c
SUMMARIES		ID	090ZU2	Q912H5	Q90ZU1	098158	Q9PWA6	Q910C9	080657	Q91ZL0	091265	Q918E0	085040	Q8SQA6	Q91ZL1	891960	Q95N01	O GENTIP 6
		DB	: :1	11	11	12	13	13	13	11	11	13	9	9	11	4	9	-
		Query Match Length DB	92	92	81	95	90	06	91	92	92	89	92	93	91	66	99	0
	æ	Query Match	67.9	67.3	64.4	33.5	33.0	32.8	32.7	32.6	32.5	31.7	30.1	29.0	28.4	27.8	27.6	26 1
		Score	332	329	315	164	161.5	160.5	160	159.5	159	155	147	142	139	136	135	127.5
	;	Result No.	1	7	m	4	S	9	7	80	6	10	11	12	13	14	. 15	16

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61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLS 92

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09r043 mus musculu 08q56 gallus gall 014745 homo sapien 09ere0 rattus norv 095689 homo sapien 091084 mus musculu 095md5 hos taurus 08q55 gallus gall 09qyd7 mus musculu 09tq3 mus musculu 09ttq4 equus cabal 09ttq3 equus cabal 09ttq3 equus cabal 09ttq1 equus cabal 09ttq2 equus cabal 09tq1 equus cabal 09ttq2 equus cabal 09ttq1 equus cabal 09ttq2 equus cabal	Q90554 home opten Q91v44 mus musculu Q9pt04 oncorhynchu Q90825 gallus gall Q9qx28 mus musculu
131 11 09R043 91 13 080G56 90 4 014745 91 10 09EEE0 79 4 095689 133 11 091784 100 13 080G55 148 11 092218 116 11 090830 100 6 09TTQ3 99 6 09TTQ3 97 6 09D72 116 11 099832 116 11 099824 116 11 092292 75 6 09TTQ3 97 6 09TTQ3 97 6 09TTQ3 98 13 080GV8 118 12 099ZM1 109 13 080GV8 118 12 099ZM1	24111111
255.66 222222222225.66 22222222222222222	17.2 17.1 16.9 16.7 16.6
127.5 1123.5 1123.5 1109.5 1007.5 1007.5 1008.5 1009.5 1000.5 100	83.5 82.5 81.5 81.5
11112222222222222222222222222222222222	44444444444444444444444444444444444444

## ALIGNMENTS

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1 MARLQTALLVVLVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                             Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                        "Macrophage derived chemokine is localized to thymic medullary epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
thymocytes.",
Blood 0:0-0(1999).
EMBL; AF163476; AAD55763.1; -.
SCA22.
InterPro; IPR001811; Chemokine_IL8.
Ffam; PF00048; IL8; I.
SMART; SMO0199; SCY; 1.
SEQUENCE 92 AA; 10331 MW; 17FE31A87F352E63 CRC64;
                                                                                                                                                                                                                                                                           STRAIN=BALB/C;
Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
Gray P.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67.9%; Score 332; DB 11; Length 92; 63.0%; Pred. No. 1.4e-34; Live 20; Mismatches 14; Indels
                                                                      01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                     92 AA.
                                     PRT;
                                                                                                                             Macrophage-derived chemokine. SCYA22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 63.0%
Matches 58; Conservative
                                    PRELIMINARY;
                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                  NCBI_TaxID=10090;
                                     Q9QZU2
RESULT 1
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us-09-509-165a-2.rspt

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KSHV
Query Match
Best Local Si
Matches 55;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bacon K.B., Feng L.;
Mononuclear cell-infiltrate inhibition by blocking macrophage-derived chemokine results in attenuation of developing crescentic qlomerulonephritis.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-LEW;
Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MOY-2001 (TrEMBLrel. 17, Last annotation update)
Macrophage-derived chemokine (Fragment).
Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    glomerulonephritis.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; A4432871; AAL30397.1; -.
InterPro; IRROUB11; Chemokine_ILB.
Pf00048; ILB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10420 MW; CBC88124502EFC0C CRC64;
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                                                                                                                                                                                                                                                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67.3%; Score 329; DB 11;
64.1%; Pred. No. 3.4e-34;
iive 17; Mismatches 16;
61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLS 92
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61 RKPGVVLITIKNRDICADPRMLWVKKILHKLA 92
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STRAIN-SPRAGUE-DAWLEY; TISSUE-THYMUS;
                                                                                                                                                                                                                                                                                                                            Created)
                                                                                                                                                                                                                                            PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blood 0:0-0(1999).
EMBL, AFIG3477; AAD55764.1; -.
HSAP: 098157; ICM9.
InterPro: IPR001811; Chemokine_ILB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Macrophage-derived chemokine CCL22
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                                                                                                                                                                                                                                                                                                               01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2002 (TrEMBLrel. 20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 64.1%
nes 59; Conservative
                                                                                                                                                                                                                                        PRELIMINARY;
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SMART; SM00199; SCY; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID-10116;
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SEQUENCE
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                                                                        12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
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Neipel F., Albrecht J.C., Fleckenstein B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus and man herpesvirus 8: determinants of its pathogenicity?";
J. Virol. 71:4187-4192(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDLINE-97121480; PubMed-8962146;
Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S., "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
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Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                             Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. Michola J., Wan X., Clufo J., Wan X., Clufo J., Wan X., Clufo J., Rudrickson S., Guo H.G., Hayward G.S., Reitz M.S.; Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
Length 81;
                                     Indels
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Ren S., Lin S.-F., Miller G.;
Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases.
EMBL; U75689; AAC57095.1; -
EMBL; U74585; AAB61704.1; -
EMBL; U93872; AAB62671.1; -.
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Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                Q98158 PRELIMINARY; PRT; 95 AA. Q98158; 012569; ClarBallog, Created) PRT-1997 (TrEMBLrel. 02, Created) 01-JUL-1997 (TrEMBLrel. 04, Last sequence update) 01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
64.4%; Score 315; DB 11;
67.9%; Pred. No. 1.8e-32;
11ve 16; Mismatches 10;
                                                                                                                                                  72 DKEICADPRVPWVKMILNKLS 92
                                                                                                                                                                       :::||||||: ||| ||:||:
61 NRDICADPRMLWVKKILHKLA 81
                                                                                                                                                                                                                                                                                                                                                                                                                              Gammaherpesvirinae; Rhadinovirus.
NCBI_TaxID=37296;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Science 274:1739-1744(1996).
                                     55; Conservative
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                   Similarity
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4 LQTALLVVLVLLAVALQATEA--GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCP 61
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                           Hughes S.M., Bumstead N.;
Hughes S.M., Bumstead N.;
Mapping of the gene encoding the chicken homologue of the mammalian chemokine SCYA4.";
Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL, A1243034; CAB45103.1;
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; I.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN 1.
SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32.8%; Score 160.5; DB 13; Length 90; 38.2%; Pred. No. 1e-12;
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32.7%; Score 160; DB 13; Length 91;
Best Local Similarity 37.8%; Pred. No. 1.2e-12;
Matches 34; Conservative 20; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34; Indels
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01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Chemokine ah294.
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         gallus (Chicken).
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Best Local Similarity
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Q8QG57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA4.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Phasianidae;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                           1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
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Hughes S.M., Bumstead N.;
"Mapping of the gene encoding the chicken homologue of the mammalian
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                                                                                                                                                                                                                                                                          Length 95;
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                                                                                                                                                                                                                                                                                                                              37; Indels
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Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.
EMBL, AP146730; AAD48772.1; -...
HSSP; P13235; HUM.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                                   SMART; SM00199; SCY; 1.
Hypothetical protein.
SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSTIE; PS00472; SMALL, CYTOKINES_CC; 1.
SEQUENCE 90 AA; 9986 MW; 50AF9679A26751CB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-DEC-2001 (TIEMBLrel. 19, Created)
01-DEC-2001 (TIEMBLrel. 19, Last sequence update)
01-MAR-2002 (TIEMBLrel. 20, Last annotation update)
Macrophage inflammatory protein 1-beta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                    33.5%; Score 164; DB 12;
34.1%; Pred. No. 3.8e-13;
ative 23; Mismatches 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGVVEITRKGREVCANPQNDWVQDYMNKM 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63 PGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 PRPGVVLLTFRDKEICADPRVPWVKMILNKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
EMBL; U50139; AAD11536.1; -. EMBL; U50138; AAD11536.1; -. INFSSP; 098157; 1VMP. InterPro; IPRO11811; Chemokine_ILB. Pfam; PF00048; ILB; 1. SWART; SM00199; SCY; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAY-2000 (TrEMBLrel. 13, 01-MAY-2000 (TrEMBLrel. 13, 01-MAR-2002 (TrEMBLrel. 20,
                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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Best Local Simi
Matches 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chemokine.
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Best Local S
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Q910C9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
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PRELIMINARY;
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Matches 27; Conserv
                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RANTES protein.
                                   01-OCT-2000
01-OCT-2000
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                              Query Match
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Q8SQ40;
                                                                                                                                                                                                                                                                                                   Signal.
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                                                                                                                                                                                                                                                                                                              SIGNAL
                         Q918E0
                                                                                                                                         Gallus
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Q8SQ40
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                                                                                                                                                                                                                                                                                                3 RLQTALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPR 62
                                                                                                                                                                                                                                                                                                                       2 KLCLSTLALLLLAEFCAPVTSAPRGSDPPIS-CCFSYASRKLPRNFVTDXYETSSLCSK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPR 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                  Sigmodon hispidus (Hispid cotton rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Sigmodontinae;
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                                                                                                                                                                                                                                                 DB 11; Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Blanco J.C., Pletneva L.M., Prince G.A.;
"Signodon hispidus cytokines, chemokines and interferons.";
"Signodon hispidus cytokines, chemokines and interferons.";
"Signodon hispidus cytokines, chemokine BMBL, AV059407; AR126704.1; ...
InterPro; IPR000827; CC_chemokine_sml.
InterPro; IPR001811; Chemokine_IL8.
PR031TE; PS00408; IL8; 1.
PROSITE; PS00408; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 92 AA; 10334 MW; CF9AAB3D94DCAF79 CRC64;
                                                                                                         SEQUENCE FROM N.A.
Blanco J.C., Pletneva L.M., Prince G.A.;
Blanco J.C., Pletneva L.M., Prince G.A.;
Sigmodon hispidus cytokines, chemokines and interferons.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AF421392, AAL16933.1;
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 92;
                                                                                                                                                                                                                                               ; Score 159.5; DB 11; Length; Pred. No. 1.4e-12; 13; Mismatches 40; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35; Indels
                                                                                                                                                                                             Pfam; PF00048; IL8; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 159; DB 11;
Pred. No. 1.6e-12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32.5%; Scor.
33.7%; Pred. No. 1...
22; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                    92 AA
                                                                                                                                                                                                                                                                                                                                                63 PGVVLLTFRDKEICADPRVPWVKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                               61 PAVVELTRKGKEVCADPSQPWVNEYVNDL 89
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Macrophage inflammatory protein-1 alpha
           Macrophage inflammatory protein 1 beta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sigmodon hispidus (Hispid cotton rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                              32.68;
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                                                                                                                                                                                                                                                                        35; Conservative
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Matches 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID-42415;
                                                                                    NCBI_TaxID-42415;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MIP1 ALPHA
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RESULT 10

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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Euteleostom1;
Felis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 13; Length 89;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.

Kimura T., Kano R., Hasegawa A.;

"molecular cloning of feline RAWTES gene.";

Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.

EMBL, AB084479; BAB88940.1; -.

SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . ZEGF087140BA3CE8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHEMOKINE K203.
6FA2EA7A4950CA75 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Felis silvestris catus (Cat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Felidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                             Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31.7%; Score 155; DB 13; -
                                                                                                                                                                                                                                                                                                                 ., Weining K.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30.1%; Score 147; DB 6; 32.5%; Pred. No. 5.4e-11; 11ve 20; Mismatches 34
89 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26.7%; Pred. No. 5e-1
ive 29; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64 GVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTENTIAL.
                                                                                                                                                                                                                                                                                           MEDLINE=20170941; Pubmed=10704244; Sick C., Schneider K., Staehell P., We "Novel chicken CXC and CC chemokines." Cytokine 12:181-186(2000). EMBL: Y18692; CAB70956.1; -. HSSP; P13236; 1HUM.
                                         Created)
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PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR001811; Chemokine_IL8
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
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(TrEMBLrel. 15, I
(TrEMBLrel. 19, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22 89
89 AA; 9896 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 26.7 nes 24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27; Conservative
                                                                                                      Chemokine K203 precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                               Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63
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PAVVFVTRRKRQVCANPOKKWVR

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12 RESULT Q8SQA6

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7 ALAVILCTWALCNQVLSA-PLAAD-TPTACCESYTSRQIPQNFIADYFETSSQCSKPSVI 64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tsujimoto H.;
"Molecular Cloning of Canine Thymus and Activation-Regulated Chemokine (TARC) Gene and its Expression in Various Tissues.";
J. Vet. Med. Sci. 00-0(201).
EMBL; AB054642; BAB62131.1;
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR01811; Chemokine_Lib8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 ALLVVLVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVV
                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Euteleostomi;
Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
Maeda S., Mizuno T., Yamashita K., Kurata K., Masuda K., Ohno K.,
                                                                                                            01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Similar to small inducible cytokine A3 (homologous to mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

27.8%; Score 136; DB 4; Length 93;
Best Local Similarity 32.9%; Pred. No. 1.4e-09;
Matches 28; Conservative 18; Mismatches 37; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6; Length 99;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-B-CELL;
Strausberg R.;
Strausberg R.;
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC007783; AAH07783.1; -.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 93 AA; 10144 MW; A7A78E374006D6IE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMALL_CYTOKINES_CC; UNKNOWN_1.
11052 MW; 6BA28EDDF857BE81 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Last sequence update)
Last annotation update)
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                                                    93 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
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                                                       PRELIMINARY;
                                                                                Q96168;
01-DEC-2001 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
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                                                                                                                                                                                                                                                                 Homo sapiens (Human)
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Best Local Similarity
Matches 30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                           [1]
SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9606;
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                                                                                                                                                                                                                                     Mip-la).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
                                                                                                                                                                                                                            Macrophage inflammatory protein-1 alpha.

Bos taurus (Bovine).

Eukaryota: Metazoa: Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;

Bovidae: Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4;
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"Sigmodon hispidus cytckines, chemckines and interferons.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AR421391; AL16912.1; -InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemckine_IL8.
Pfam, PF00048; IL8; IL.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 91 AA; 10082 MW; DODGEAEABE422FF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28.4%; Score 139; DB 11; Length 91; 32.2%; Pred. No. 5.6e-10; Live 22; Mismatches 35; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Werling D.;
"Role of chemokines in RSV infection.";
"Role of chemokines in RSV infection.";
"Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases."
EMBL; AX778406.1;
SCHOITENCE 93 AA; 10118 MW; 1266BFBFCEE5E8E9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34; Indels
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                       Last sequence update)
Last annotation update)
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Pred. No. 2.4e-10;
                                                                                       93 AA
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Best Local Similarity 32.27
Matches 29; Conservative
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NCBI_TaxID-42415;
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RESULT 13 Q91ZL1

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609.878 Million cell updates/sec
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2001.DAT:
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       908470 seqs, 133250620 residues
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                            OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Perfect score:
Sequence:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Result	ar Core	Query	Query Match Length DR	ä	£	Documentation
	)			3 :		
-	441	100.0	86	19	AAW59432	Human chemokine pr
7	441	100.0	93	18	AAW20058	Macrophage derived
e	441	100.0	93	19	AAW62783	Amino acid sequenc
4	441	100.0	93	19	AAW59433	Human chemokine pr
ญ	441	100.0	93	19	AAW40811	Macrophage-derived
9	441	100.0	93	20	AAY26175	Macrophage-derived
7	441	100.0	93	20	AAY24414	Human macrophage d
80	441	100.0	93	20	AAY05871	Human macrophage-d
б	441	100.0	93	20	AAY06829	Macrophage derived
10	441	100.0	93	21	AAB07500	A human monokine d

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19-MAR-1998.

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	11	⊣	0.00	20.0	5.5	AAOL4045	Humai	Human macrophage-d
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	14		0.00	5 E	22	AAB68352	Amino	acid segmen
	15		0.8	6 6	50	AAY05879	Human	macrophage-d
	16		7.5	93	20	AAY05880	Macac	_
	17		0.0	m c	18	AAW20059	Human	
	10	397	0.06	1 M	200	AAY05872	Humar	Macrophaye derived Human macrophage-d
	20		7.5	69	23	AA020022	Human	)
	21		17.5	69	23	AA014155	Human	MDC protein.
	22		5.7	70	18	AAW20060	Humar	
	53.5		ر. 7 ت	0 6	0 0	AAY24413	Macro	₽.
	4.7		. r	7 2	0 0	AAY038/3	HUMBAD	macrophage-d
	26			172	70	AAY29895	Human	MDC and huma
	27		7.5	334	20	AAY29904	Human	MDC and huma
	28		17.5	587	20	AAY29900	Humar	Human MDC and HIV-
	29		6.2	68	18	AAW17668	Stem	mobilis
	30		8.9	69	18	AAW20061	Humar	
	31		æ.	9 0	20	AAY24415	Macro	Macrophage derived
	32		æ. c	5 C	200	AAY05874	Humar	
	33		7.5	200	87.0	AAW20062	Humar	
	4.0		1.5	א כ ס	9 0	AA124410	Macin	Macrophage derived
	25			7 0	2 0	AA1036/3	Chimar	Human macrophage-u
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	40			1 00	2 0	AAB61808	Mirrine	ne MDC mature
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	7	4.5	9.8	67	23	AAG78396	Humar	Human/mouse hybrid
	44 21	4.5		67	23	AAG68359	Chimeric	eric chemokine
		213	8.3	37	22	ABB39053	Peptide	de #6559 enco
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RESULT	JLT 1							
AAW394 ID A	39432 AAW59432		standard;	Protein		86 AA.		
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DE	Human	chemokine protein	ne pr		331D5	5 from CDla+ cDNA	library.	
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XX NA	W09811	WO9811226-A2.						
4 4	10.440	0001-0						

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A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytckines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
 treatment of inflammatory diseases, MDC antibodies used to treat
Crohn's disease, rheumatoid arthritis, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amino acid sequence of human STCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93
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                                                 English.
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                                                                                                                                                                                                                                                                                                                                              Best_Local Similarity 100.
Matches 82; Conservative
                                                 Claim 1; Page 73; 106pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Andrew DP, Chang M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-333326/29.
N-PSDB; AAV38933.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AMGE-) AMGEN INC.
                                                                                                                                                                                                                                                                                              93 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-SEP-1998
                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW62783
   # # X & X O O O O O O O O O O O X O
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                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                             been isolated from a 90 per cent CDIa+ cDNA library and obtained by random sequencing. Nucleic acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be used in diagnostics. The chemokines themselves are useful for treatment of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by
                                                                                                                                                                sequence represents a novel human chemokine protein, 331D5 which has
                                                                                                                                                                                                                                                                                                                                                                                                             1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                                                                                                                                                                                                                                                                                                                                                                            5 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 64
                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation; wound healing; anglogenesis; inflammation.
                                                                            Mammalian CC and CXC chemokines - useful for treatment of, e.g. cancer and degenerative conditions
                                                                                                                                                                                                                                                                                                                                                                            ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Macrophage derived chemokine (MDC) and analogues - used in the
                                                                                                                                                                                                                                                                                                                                              Length 86;
                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Macrophage derived chemokine for treating inflammation.
                                                                                                                                                                                                                                                                                                                                         100.0%; Score 441; DB 19; 100.0%; Pred. No. 1.2e-47; ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25..93
/label= mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label= sig_peptide
 Zlotnik A;
                                                                                                                               Disclosure; Page 75; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW20058 standard; Protein; 93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 DKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95US-0558658
95US-0479620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96WO-US10114
                                                                                                                                                                                                                                                                             the inventive compositions.
                                                                                                                                                                                                                                                                                                                                                                           82; Conservative
 Hedrick JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godiska R, Gray PW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-052324/05
                              WPI; 1998-207387/18
                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                             86 AA;
                                               N-PSDB; AAV34996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; AAT76529
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .6-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-DEC-1996
Gorman DM,
                                                                                                                                                                                                                                                                                                               Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW20058;
                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide
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                                                                          12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents human STCP-1. STCP-1 polypeptides demonstrate chemokine activity for T-cells. The polypeptides are useful prophylactically or therapeutically to treat HIV infection and other
                                                           1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR
                                                                                                                                                                                                                                                                                                                                        Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
inhibitory compound; assay; reduce; circulatory system STCP-1 level;
joint inflammation; rheumatoid arthritis; lupus.
                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human STCP-1 polypeptides with chemokine activity - useful e.g. to treat HIV infection or other viral or bacterial pathogens infecting T-cells, macrophages or other immune system cells
                              ö
   Length 93;
100.0%; Score 441; DB 18;
100.0%; Pred. No. 1.4e-47;
ive 0; Mismatches 0;
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used in diagnostics. The chemokines themselves are useful for
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                                                                                                                                                                                                                    AAW40811
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       macrophages or other immune system cells. They can be included (optionally chemically modified) with a pharmacoutically acceptable carrier and optionally other pharmacouticals (e.g. AZT, antibiotics etc.) in therapeutic compositions for treating these conditions. STCP-1 also useful to assay for inhibitory compounds used to reduce circulatory system STCP-1 levels to alleviate e.g. joint inflammation associated with rheumatoid arthritis, lupus or other autoimmune diseases. The nucleic acids are useful to prepare antibodies or hybridomas. The stronger of the stronger of the system STCP-1 DNA/RNA in mammalian samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents a novel human chemokine protein, 331D5. Nucleic acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be
                                                                                                                                                                                      1 LVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                                                                                                                                                  pathogens infecting T-cells,
                                                                                                                                                                                                                                                                                                                                                                                     Chemokine; human; detection; forensic; diagnostic; treatment; cancer; degenerative condition; abnormal proliferation; regeneration;
                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammalian CC and CXC chemokines - useful for treatment of, e.g.
                                                                                                                                                                  ;
                                                                                                                                             Length 93;
                                                                                                                                                                  Indels
                                                                                                                                           100.0%; Score 441; DB 19;
ilarity 100.0%; Pred. No. 1.4e-47;
Conservative 0; Mismatches 0;
associated with viral/bacterial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25..93
/label= 331D5
/note= "chemokine protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                        Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer and degenerative conditions
                                                                                                                                                                                                                              DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                      AAW59433 standard; Protein; 93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 78; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1..24
/label= signal
                                                                                                                                                                                                                                                                                                                                                                   Human chemokine protein 331D5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97WO-US15315
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gorman DM, Hedrick JA,
                                                                                                                                                                                                                                                                                                                                                                                                            degeneration; atrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SCHE ) SCHERING CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-207387/18.
N-PSDB; AAV34997.
                                                                                                                                                       Local Similarity
                                                                                                                        93 AA;
                                                                                                                                                                                                                                                                                                                                              27-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-SEP-1997;
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                                                                                                                                                                82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-MAR-1998
                                                                                                                          Sequence
                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                 72
                                                                                                                                                                                                                                                                                                                         AAW59433;
                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein
                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                 RESULT 4
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                                                                                                                                                                                                                                         1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                                                                                                                                                                                                                  Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy; arthritis; inflammatory disorder; cancer; Crohn's disease;
of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by the inventive
                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   - useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         purifying or detecting the chemokine or modulating its activity
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                                                                                                                                           Length 93;
                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antibodies specific for macrophage-derived chemokine
                                                                                                                                        Score 441; DB 19;
Pred. No. 1.4e-47;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "leader peptide"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                     DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                AAW40811 standard; Protein; 93 AA
                                                                                                                                        100.0%;
ilarity 100.0%;
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Macrophage-derived chemokine
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25..93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-008038/01
                                                                                                                                        Query Match
Best Local Similarity
Matches 82; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ICOS-) ICOS CORP.
                                                                                                AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ¥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atherosclerosis.
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                                                                                              93
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                                                    compositions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW40811;
                                                                                                                                                                                                                                                                                                                                  61
                                                                                                Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide
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1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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                                                                                                                                         AAY24414;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence
                                             61
                                                                                                                                                                                                                                                                              Peptide
                                                                                                                                                                                                                                                                                                   Protein
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                                                       administered either concurrently with one or more purified antigens against which an immune response is desired or within a time period either before or after antigen administration. The chemokine gene is isolated by PCR, and administered by constructing an expression plasmid vector which can be expressed in a coordinated manner upon introduction in a suitable cell. The vaccines are immunostimulatory and can be used to treat microbial diseases especially HIV.
                                           LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR
                                                                                                                                                                                                                                              Macrophage-derived chemokine; MDC; vaccine; immune response; antigen; humoral response; cell-mediated response; PCR; immunostimulatory; expression plasmid vector.
                          Gaps
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                                                                                                                                                                                                                                                                                                                                            25..93
/note= "mature macrophage-derived chemokine"
     Length 93;
100.0%; Score 441; DB 19;
100.0%; Pred. No. 1.4e-47;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 441; DB 20;
100.0%; Pred. No. 1.4e-47;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 6; Fig 1A(1)-1A(2); 134pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
                                                                                                                                                                                                                                                                                                                                 /note= "signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Garzino-Demo A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methods of enhancing vaccine efficacy
                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                      DKEICADPRVPWVKMILNKLSQ 82
                                                                                                 AAY26175 standard; Protein; 93 AA.
                                                                                                                                                                                                                          Macrophage-derived chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-US26291
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                                                                                                                                                                                                     29-SEP-1999 (first entry)
                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Devico AL, Gallo RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-385578/32.
             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; AAX80630
                                                                                                                                                                                                                                                                                       Homo sapiens
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                     82;
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                                                                                                                                                                                   AAY26175;
  Query Match
Best Local S
                                                                                     61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                     Peptide
                                                                                                                                                                                                                                                                                                                                           Protein
                        Matches
                                                                                                                                         RESULT 6
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Gaps

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Conservative

82;

Matches

Best Local Similarity

Query Match

Length 93; Indels

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atheroselerosis, arthritis and pulmonary fibrosis. The present sequence represents human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
                                                                                                                                                                                                                                                                                                                                                                                                                           Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 441; DB 20;
Pred. No. 1.4e-47;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 2; Column 41-43; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                            Human macrophage derived chemokine.
                                                                                             DKEICADPRVPWVKMILNKLSQ 82
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                                                                                                                                                                                                                                        AAY24414 standard; Protein; 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1..24
/label- signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95US-0660542.
95US-0479620.
95US-0558658.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96US-0660542.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25..93
/label- MDC
                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godiska R, Gray PW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-443621/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 82; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAX90162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-JUN-1996;
07-JUN-1995;
16-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-JUN-1996;
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LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
                                                                                                                                                                                                                                                                                                                                                                                                                                              Macrophage derived chemokine (MDC) encoding DNA.
                                                                                                                                                                                                                                                                AAY06829 standard; Protein; 93 AA
                                                                                     DKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Macrophage derived chemokine;
human immunodeficiency virus;
bovine immunodeficiency virus.
                                                                                                                                                                                                                                                                                                                                                                                    25-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-1999.
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                                                      61
                                                                                                                                                                                                                                                                                                                          AAY06829;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptide
                                                                                                                                                                                                      RESULT 9
                                                                                                                                                                                                                                    AAY06829
                                                                                                                                                                                                                                                                                                                          NAME OF THE PROPERTY OF THE PR
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                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       designated macrophage derived chemokine (MDC) that binds to the CCR4 chemokine receptor. The invention provides vertebrate MDC polypeptides (see also AavOS876, AavOS877 and AavOS80) and isolated polyputclectides encoding them, vectors and host cells, and methods for the recombinant or synthetic production of MDC. Also provided are MDC analogues, antibodies and antagonists. The MDC antagonists are used for the preparation of medicaments for the suppression of the proliferation of amammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, companies or proliferation of clups and for treatment or a mammal, and in treating asthma (all claimed). MDC polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vertebrate Macrophage Derived Chemokines, analogues and antagonists
                                                                                                                                                                                                                                                                                                                                                                                                                                 MDC; macrophage derived chemokine; C-C chemokine; human; antagonist; chemoattractant; antiproliferative; dermatological; immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present sequence represents a novel human C-C chemokine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Raport CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 441; DB 20;
100.0%; Pred. No. 1.4e-47;
ive . 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gray PW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    in claimed vaccine compositions
                                                                                                                                                                                                                                                                                                                                                                              Human macrophage-derived C-C chemokine MDC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "signal peptide"
25.93
/note= "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Godiska R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 124; 147pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
82
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DKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                   AAY05871 standard; Protein; 93
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                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; AAX58316
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chantry DH,
                                                                                                                                                                                                                                                                                                                    02-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-APR-1998;
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                                                                                                                                                                                                                                                       AAY05871:
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61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide
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                                                                                                                                                                          AAY0587
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98WO-US19450 97US-0931764

27..45
/note= "N-terminal fragment specifically claimed
for in claim 18"

Location/Qualifiers

human;

MDC; lentivirus infection; huma feline immunodeficiency virus;

"N-terminal fragment specifically claimed for in claim 19"

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                                                                                                                                                                                                                                                                                                                                                                                                                 invention provides a movel method of treating or preventing lentivirus invention provides a movel method of treating or preventing lentivirus (LV) infection or replication in a human subject, that comprises administering to the subject a composition comprising MDC or a derivative of MDC. The products can be used for treating or preventing LV infection or replication, particularly HIV infection or replication. The products can also be used for the prognosis for a LV infection, particularly an HIV infection or infection or methods can also be used with other LVs, e.g. sindan immunodeficiency virus, feline immunodeficiency virus and bovine immunodeficiency virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treatment or prevention of lentivirus, particularly HIV infection
                                                                                                                                                                                                                                                                                                                                                                                             This represents a human macrophage derived chemokine (MDC). The
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                                                                   Markham PD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 441; DB 20;
100.0%; Pred. No. 1.4e-47;
iive 0; Mismatches 0;
                                                                      Garzino-Demo A,
                                                                                                                                                                                                                                                                                                                         Claim 16; Page 97-98; 103pp; English
(ALKU ) AKZO NOBEL NV.
                                                                Gallo RC,
                                                                                                                                                                  WPI; 1999-244024/20.
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Matches 82; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93 AA;
                                                                                                                                                                                                N-PSDB; AAX32817
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Indels

Conservative

82;

Matches

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1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60  Ź

(first entry)

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Human; macrophage-derived C-C chemokine; MDC; immune system; leukocyte; monocyte; calcium flux; chemotaxis; medical imaging; infection; inflammation; macrophage; Crohn's disease; rheumatioid arthritis; atheroselerosis; wound healing; anglogenesis; chemotherapy; radiation therapy; tumour.
                                                                                                                                                                                                                                          Human macrophage-derived C-C chemokine (MDC).
                                                             AAO14046 standard; Protein; 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US6320023-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-1995;
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                                                                                                                                                                                08-MAY-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Godiska R,
                                                                                                                        AAO14046;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein
   RESULT 11
                                  AAO14046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The specification describes a method of modulating the trafficking of systemic memory T cells in a mammalian host. The method comprises administering a CCR4 modulating agent. It has been found that systemic administering a CCR4 modulating agent. It has been found that systemic T cells such as express high levels of CCR4. Ligands of CCR4 such as TARC (thymus and activation-requiated chemokine) and MDC (monokine derived chemokine) act as an adhesion trigger and, upon CCR4 binding, these cells undergo integrin dependent arrest to the appropriate vascular receptors. This arrest acts to localize the cells at the trarget site. The method modulates this triggering and CCR4 mediated chemotaxis to affect the localization of T cells in targeted tissues. The active agent may be a CCR4 agonist that acts to enhance T cell localization. Alternatively, it may be an antagonist that blocks CCR4 inclodical activity. A CCR4 andonist may be administered for the treatment of inflammation. The present sequence represents a human MDC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Modulating the trafficking of systemic memory T cells in mammals by administering a CCR4 modulating agent, useful for the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                          Systemic memory T cell; CCR4; TARC; integrin dependent arrest; thymus and activation-regulated chemokine; vascular receptor; MDC; monokine derived chemokine; adhesion trigger; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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100.0%; Pred. No. 1.4e-47;
ive 0; Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                      human monokine derived chemokine.
DKEICADPRVPWVKMILNKLSQ 82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wu L,
                                                                                                                                                                                                        AAB07500 standard; Protein; 93
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                                                                                                                                                                                                                                                                                                                           20-OCT-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Campbell JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.
Best Local Similarity 100.
Matches 82; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (LEUK-) LEUKOSITE INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inflammation
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                                                                                                                                                                                                                                                                      AAB07500;
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                                                                                                                                                 RESULT
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"Mature .macrophage-derived C-C chemokine, this is

/note= "Specifically claimed region"

95US-0479603

specifically claimed region" 5..39

"Signal peptide"

25..93 /note= 'note-

Location/Qualiflers

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The present sequence represents a novel human macrophage-derived C-C chemokine (MCC) of the invention. Chemokines comprise a family of small secreted proteins which attract and activate leukocytes, thereby aiding in the stimulation and regulation of the immune system. C-C cytokines are a subfamily known to activate monocytes, causing calcium flux and cemotaxis. The invention comprises a novel human MDC protein and nucleic acids, as well as methods for the production of the MDC protein and nucleic of the invention is useful in medical imaging (e.g. for imaging sites of infection, inflammation, and other sites having C-C chemokine receptor molecules. Inhibition of MDC is believed to be useful in treating diseases involving macrophages (e.g. Crohn's disease, rheumatoid arthritis or atherosclerosis). Alternatively, augmenting the effects of MDC is believed to be beneficial towards wound healing and anglogenesis. Also MDC or MDC agonists may be beneficial to patients receiving chemotherapy or radiation therapy and in the treatment of tumours.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Macrophage derived C-C chemokines useful in medical imaging and for the development of agents for controlling inflammation \cdot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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100.0%; Pred. No. 1.4e-47;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Fig 1; 22pp; English.
95US-0479603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                       WPI; 2002-074410/10.
                                                                                                                                       Gray PW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
82; Conserv
                                                                (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93 AA;
                                                                                                                                                                                                                                       N-PSDB; AAK98372
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Best Local Si
Matches 82,
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1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR

DKEICADPRVPWVKMILNKLSQ 82 

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C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13 stimulates the invasion and activation of host defence cells making it useful for treating solid tumours, e.g. Kaposi's 'sarcoma, and for enhancing resistance to acute and chronic infections, e.g. mycobacterial infections. The chemokine induces chemoteric migration of monocytes, neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to sites where they are needed. Eosinophils may be attracted to the site of a parasitic infection to kill parasite larvae. Ck-beta-13 also recruits debris-clearing and connective tissue promoting inflammatory cells, and is therefore used to stimulate wound healing, prevent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mediated autoimmune diseases, psoriasis, to regulate haematopoiesis and to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the chemokine which is useful for treating certain autoimmune diseases, atherosclerosis, chronic inflammatory and infective diseases, allergic reactions, rheumatoid arthritis, silicosis and bone marrow failure.
                                                                                                                                                                                                                                                                                  Chemokine beta 13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell; defence; activation; eosinophil; monocyte; macrophage; T lymphocyte; T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection; Kaposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis; leukaemia; autoimmune disease; psoriasis; inflammation; allergy; rheumatoid arthritis; silicosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW07604 shows human chemokine beta-13 (Ck-beta-13), a member of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 scarring and treat liver cirrhosis, osteoarthritis and pulmonary fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "given as encoded by CAC codon in AAT44026"
                                                                                                                                                                                                                                                Cytokine beta-13 stimulates migration/activation of immune cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human chemokine beta-13 - useful for treating solid tumours,
leukaemia, infections, autoimmune disease, fibrotic disorders,
psoriasis, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                 DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                 AAW07604 standard; Protein; 93 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 10; Page 46; 58pp; English.
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                                                                                                                                                                                                          (first entry)
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N-PSDB; AAT44026.
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                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9639521-A1
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                                                                                                                                                                                                          03-SEP-1997
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61
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                                                                                                                                                                     AAW07604;
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                                                                                                             AAW07604
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invention. The polypeptide and nucleic acid are useful in diagnosis and treatment of immune system-related disorders in mammals (preferably humans). Such disorders include tumours, cancers, interstitial lung disease and disorders include tumocal, cancers, interstitial lung disease and disorders include tumocal, including leukaemias, lymphomas, autoimmune disease etc. For example, certain tissues in ammunes with cancer of the immune system express enhanced/decreased levels of CKbeta-13 and mRNA encoding CKbeta-13, and diagnosis can be achieved by assaying CKbeta-13 gene expression and comparing to standard levels. The polypeptides can be administered therapeutically in pharmaceutical compositions e.g. to treat immune system-related disorders as above, treat sepsis, inhibit bone marrow stem cell colony formation curing cancer therapy, regulate haematopoiesis, stimulate wound healing etc. Compositions comprising the polymocleotides may also be administered, especially to express CKbeta-13 polypeptide in hosts to treat dysfunctions associated with aberrant endogenous CKbeta-13:
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                                                                                              12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRHRLPLRVVKHFYWTSDSCPRPGVVLTFR 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chemokine beta-13; human; CKbeta-13; immune system-related disorder; tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis; autoimmune disease; bone marrow stem cell colony formation inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      activity. The polynucleotides are also useful for mapping of chromosomes/chromosome sites. The polypeptides are useful to screen for agonists and antagonists of CKbeta-13 activity. The antibodies are useful diagnostically or therapeutically e.g. as antagonists to treat subjects requiring CKbeta-13 reduction.
                                                                            1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR
                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human chemokine beta-13 polypeptide - useful in diagnosis and treatment of immune-system related disorders e.g. cancer of the immune system; leukaemias, autoimmune diseases etc.
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                                     Indels
. 5.8e-47;
0;
                98.8%; Pred. No. 5.8e
ive 1; Mismatches
                                                                                                                                                                             72 DKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                      61 DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 haematopoiesis regulator; therapy.
                                                                                                                                                                                                                                                                                               AAW57881 standard; Protein; 93 AA
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                                   81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    Human chemokine beta-13.
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                  Best Local Similarity
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                                     Matches
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Sequence

98.9%; Score 436; DB 18; Length 93;

Query Match

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RESULT 15
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                                                          1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                         Gaps
                                                                                                                                                                                                                                                                                                    Chemokine beta-13; CKbeta-13; Addison's disease; haemolytic anaemia; rheumatic arthritis; dermatitis; allergic encephalomyelitis; glomerulomephitis; Doodpature's Syndrome; Grave's Disease; multiple sclerosis; allergic reaction; asthma; anaphylaxis; hypersensitivity; blood group incompatibility; organ rejection; graft vs host disease; inflammatory disorder; septic shock; infectious diseases; immune system relative disorder; leukemia; wound healing; inflammatory bowel disease; cancer; psoriasis; hypervascular disease; hyperproliferative disorder; atherosclerosis; bone marrow failure; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel human chemokine beta-13 polypeptides useful for treating autoimmune diseases, inflammatory diseases, infectious diseases, allergic conditions, hypervascular diseases, tumors and for wound
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0
          Length 93;
                                                                                                                                                                                                                                                                              Amino acid sequence of human chemokine beta-13 polypeptide.
                                  Indels
         Score 436; DB 19;
Pred. No. 5.8e-47;
1; Mismatches 0;
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                                  1; Mismatches
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(BGHM ) BRIGHAM & WOMENS HOSPITAL INC.
                                                                                                             DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                         AAB68352 standard; Protein; 93 AA.
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         98.98;
98.88;
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                                                                                                                                                                                                                                                      (first entry)
                                81; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-316379/33.
                     Local Similarity
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                                                                                                                                                                                                                                                     09-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-MAY-2001
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         Query Match
Best Local S
Matches 81
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                                                                                                             61
                                                                                                                                                                                                                             AAB68352;
                                                                                                                                                                          RESULT 14
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hypervascular diseases, hyperproliferative disorders, atherosclerosis and bone marrow failure. They are also useful for modulating haemostatic or thrombolytic activity, for disquesing infectious agents, modulate inflammation, inhibit bone marrow stem cells, colony formation, inhibit proliferation and differentiation of haematopoietic cells, inhibit epidermal keratinocyte proliferation, as anti-neovascularisation agent, enhance host defences, inhibit T-cell proliferation, prevent scarring during wound healing, increasing eosilophils, mobilize bone marrow stem cells, inhibit cell growth and inhibit chemotaxis and activation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRHRLPLRVKHFYWTSDSCPRPGVVLLTFR 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MDC analogue; macrophage derived chemokine; C-C chemokine; human; antigonist', chemotattractant; antiproliferature; dernatological; immunosuppressive; antifilammatory; antiathmatic; antiagragant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                      Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human macrophage-derived C-C chemokine MDC analogue.
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                                                                                                                                                                                                                                                                                                                                                                                   Score 436; DB 22;
Pred. No. 5.8e-47;
1; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 144; 147pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                      98.98;
98.88;
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97US-0939107
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Best Local Similarity 98.8
Matches 81; Conservative
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                                                                                                                                                                                                                                                                                                                                93 AA;
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                                                                                                                                                                                                                                                                         macrophages.
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the receptor that recognises MDC or forming inactive heterodimers with MDC. MDC antagonists are used in claimed methods for the proparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in a mammal, and for treating asthma.
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South Wacker Drive
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APPLICANT: Godiska, Ronald
APPLICANT: Gray, Partick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
21P: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
APPLICATION NUMBER: US/08/480,449
FILING DATE:
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100.0%; Pred. No. 8.1e-50;
Live 0; Mismatches 0;
                  US-08-375-346A-6
US-08-467-123B-6
US-09-230-371A-21
US-09-34-951-65
US-08-679-493A-156
US-08-679-493A-156
US-08-733-62-5
US-08-936-772-5
US-09-195-106-3
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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Matches 82, Conservative
MOLECULE TYPE: protein
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                 TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking FILE REFERENCE: SUN-110PRV CURRENT APPLICATION NUMBER: US/09/232,878 CURRENT FILING DATE: 1999-01-15
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APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 441; DB 4;
100.0%; Pred. No. 8.1e-50;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                          100.0%; Score 441; DB 4;
100.0%; Pred. No. 8.1e-50;
tive 0; Mismatches 0;
                                                                                                     NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 6
LENGTH: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Chicago
STATE: Illinois
SUMTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2, Application US/08479603
Patent No. 6320023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 27
FELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0°
Matches 82; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : 312/474-6300
312/474-0448
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.
Best Local Similarity 100.
Matches 82; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 530
                                                                                                                                                                                          TYPE: PRT
ORGANISM: H. sapiens
US-09-232-878-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
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TOPOLOGY: linear
    APPLICANT: Wu, Lijan
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                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
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                                                                                                                                                                                                                                                                                                                                                                             STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 441; DB 2;
100.0%; Pred. No. 8.1e-50;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEX/AGENT INFORMATION:
NAME: GASS, DATIG A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
72 DKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DKEICADPRVPWVKMILNKLSQ 82
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Sequence 6, Application US/09232878
Patent No. 624533
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
                                                                                                                           Sequence 2, Application US/08660542 Patent No. 5932703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.0
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LENGTH: 93 amino acids
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS: ADDRESSE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; MOLECULE TYPE: protein US-08-660-542-2
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GY: linear
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CITY: Chicago
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NAME/KEY: misc_feature
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12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
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Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE INTILE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100:0%; Score 441; DB 5; 100:0%; Pred. No. 8.1e-50;
                                                                                                                                                                                                                           APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS: 8
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPLANT. LAW FOX OPERATING SYSTEM: MS-DOS SOFTWARE: WORD PERFECT 5.1 CURRENT APPLICATION DATA: APPLICATION NUMBER: PCI/US95/07294 FILING DATE: June 6, 1995 CLASSIFICATION: PRIOR APPLICATION DATA: APPLICATION NUMBER: 08/464,594 FILING DATE: June 5, 1995 ATTORNEY/AGENT INFORMATION:
                                                           DKEICADPRVPWVKMILNKLSO 93
                                       61 DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 DKEICADPRVPWVKMILNKLSQ 82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPOTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM P$/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: FERRARO, GREGORY D. REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 32:
TELECOMMUNICATION:
TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
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nes 82; Conservative
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                                                                                                                                                                                                                                                                                                                                                                             CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: LINEAR
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                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 07068
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                                                                                                                                                                 PCT-US95-07294-2
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                                                                                                                                             RESULT
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/note="The amino acid at position 24 is selected from the group consisting of arginine, glycine, alanine, valine, leucine, rolline, serine, threonine, promylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
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3: Marshall, O'Toole, Gerstein, Murray & Borun
6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CAURENT APPLICATION DATA:
PILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and methionine."
ADDRESSEE: Marshall, O'Toole, Gers
STREET: 6300 Sears Tower, 233 Sout
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-UNW-1995
ATTORNEY/AGENT INFORMATION:
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OTHER INFORMATION:
OTHER INFORMATION: /note
OTHER INFORMATION: yeoup
OTHER INFORMATION: valin
OTHER INFORMATION: threo
OTHER INFORMATION: aspar
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STRANDEDNESS: single
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OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
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OTHER INFORMATION:
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OTHER INFORWATION:
OTHER INFORWATION:
OTHER INFORWATION:
OTHER INFORMATION:
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LOCATION: 1..69
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MOLECULE TYPE: peptide
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US-08-660-542-30
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                   /note="The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, aspatiathe, histidine, aspatiate, glutamane, asparagine, glutamine, and cysteine."
                                                                                                                                                                  /note-"The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cystelne."
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                                                                                                                                                                                                                                                                                                                                                                                                     12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRPGVVLLTFR 71
                                                                                                                                                                                                                                                                                                                                         Gaps
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Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                             90.0%; Score 397; DB 2; Length 93; 92.7%; Pred. No. 4e-44; ive 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 25-3267
TELEX: 25-3267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Illinois
COUNTRY: United States of America
ZIP: 6606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                            OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                              OTHER INFORMATION: OTHER INFORMATION:
                       INFORMATION:
INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
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Matches 76; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chicago
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                                                                                                       FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-660-542-30
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                                                                              14 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 73
                                                                                                                      61
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                                                                                                       2 GPYGANMEDSVCCRDYVRYRLDLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: MASSHAll, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
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Length 70;
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Pred. No. 2.6e-41;
2; Mismatches 0; Indels
                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURREWY APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
87.5%; Score 386; DB 2; 1
100.0%; Pred. No. 7.5e-43;
Live 0; Mismatches 0;
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FR: 27866/33318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORREY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                         Sequence 31, Application US/08660542 Patent No. 5932703 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 31
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84.8%;
ilarity 97.1%;
Conservative
                                          69; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Gass, David A. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; MOLECULE TYPE: peptide US-08-660-542-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 514
                                                                                                                                                                   74 KMILNKLSQ 82
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Best Local Similarity
Matches 67; Conserva
Query Match
Best Local Similarity
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STREET: 650.
TTMY: Chicago
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US-08-660-542-31
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2 VLLAV-ALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR
                                 APPLICANT: Reitz, Marvin
TITLE OF INVENTION: No. 6264958e1 Genes of Kaposi's Sarcoma
TITLE OF INVENTION: No. 6264958e1 Genes of Kaposi's Sarcoma
TITLE OF INVENTION: Associated Herpesvirus
FILE REFERENCE: 1107.78372
CURRENT APPLICATION NUMBER: US/09/230,637
CURRENT FILING DATE: 1999-11-23
PRIOR FILING DATE: 1996-07-25
PRIOR FILING DATE: 1996-07-24
NUMBER OF SEQ ID NOS: 62
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 26
LENGTH: 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: LI, ET AL.
IIILE OF INVENTION: Macrophage Inflammatory Protein - 3 and
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Kaposi's sarcoma-associated herpes-like virus
US-09-230-637-26
                                                                                                                                                                                                                                                                                                                                                                                                     35.9%; Score 158.5; DB 4; 38.8%; Pred. No. 3.1e-13; tive 20; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: CARELLA, BYRNE, BAIN, GILFILLAN, E: CECCHI, STEWART & OLSTEIN 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/208,339A
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MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/208,339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/08208339A Patent No. 5504003 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 DKEICADPRVPWVKMILNKL 80
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72 GRQICADPSKNWVRQLMQRL 91
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                    Hardwick, J. Marie
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 36,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 38.84
Matches 31; Conservative
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STREET: 6 DLL
CITY: ROSELAND
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CLASSIFICATION:
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ADDRESSEE:
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US-08-208-339A-4
                    APPLICANT:
APPLICANT:
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                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
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                                                                                                                                                                                                                                                                                                                   E: Marshall, O'Toole, Gerstein, Murray & Borun
6300 Sears Tower, 233 South Wacker Drive
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 362; DB 2;
Pred. No. 9.5e-40;
3; Mismatches 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Gass, David A. REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: United States of America ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                 Sequence 32, Application US/08660542 Patent No. 5932703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 26, Application US/09230637
Patent No. 6264958
GENERL INFORMATION:
APPLICANT: Hayward, Gary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82.1%;
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 82.1
Best Local Similarity 94.2
Matches 65; Conservative
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                    74 KMILNKLSQ 82
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STRANDEDNESS: sir
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CALCAGO
STATE: Ill:
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                                                                                              RESULT 9
US-08-660-542-32
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Gaps

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Length 95; Indels

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1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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Patent NO. 641562

GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1);
TITLE OF INVENTION: MYHER: US 08/208,339
EARLIER APPLICATION NUMBER: US 08/46,881
EARLIER FILING DATE: 1995-06-06
EARLIER PAPLICATION: NUMBER: US 08/468,775
EARLIER PAPLICATION: MYMBER: US 08/468,775
EARLIER PILING DATE: 1995-06-06
EARLIER PILING DATE: 1996-09-30
NUMBER: OF SEQ ID NOS: 65
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APPLICANT: Nicholas, John
APPLICANT: Nicholas, John
APPLICANT: Reitz, Marvin
TITLE OF INVENTION: No. 6264958el Genes of Kaposl's Sarcoma
TITLE OF INVENTION: Associated Herpesvirus
FILE REFERENCE: 1107.78372
CURRENT APPLICATION NUMBER: US/09/230,637
                                                                                                  Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 89;
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                                                                                                                                                  Indels
                                                                                               ; Score 151; DB 3;
; Pred. No. 2.7e-12;
17; Mismatches 33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-230-637-40
; Sequence 40, Application US/09230637
; Patent No. 6264958
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                               61 DKEICADPRVPWVKMILNKL 80
                                                                                                                                                                                                                                                                                                                             GRQICADPNKKWVQKYISDL 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 DKEICADPRVPWVKMILNKL 80
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                                                                                             Query Match
Best Local Similarity 35.0%;
Matches 28; Conservative 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patentin Ver. 2.0
                         ; MOLECULE TYPE: protein US-08-722-719-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapiens
US-09-334-951-6
  linear
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US-09-334-951-6
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LENGTH: 89
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: ADAMS, MARK D. TITLE OF INVENTION: TREATURE COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: TREATURE DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY TITLE OF INVENTION: FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
                                                                                                                                               1;
                                                                                                                                                                                             1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                                                                                                                                                                           |::| : | ||:||:|| | 8 LLVLVCTMALCSCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKR 65
                                                                                                                                                  Gaps
                                                                                               Length 89;
                                                                                                                                             33; Indels
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STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 30-SEP-1996
CLASSIFICATION: 435
                                                                                             34.2%; Score 151; DB 1; 35.0%; Pred. No. 2.7e-12; tive 17; Mismatches 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 455
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,209
FILING DATE: 22-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/208,339
FILING DATE: 08-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/46,881
FILING DATE: 05-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/46,681
FILING DATE: 06-UNH-1995
FILING DATE: 06-UNH-1995
FILING DATE: 06-UNH-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 08/468,775 FILING DATE: 06-JUN-1995 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/08722719
Patent No. 6001606
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                        61 DKEICADPRVPWVKMILNKL 80
                                                                                                                                                                                                                                                                                                                                     66 GRQICADPNKKWVQKYISDL 85
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REGISTRATION NUMBER: 36,68E
REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROSEN, CRAIG A. RUBIN, STEVEN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (202) 371-260
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 6:
                                                                                          Query Match
Best Local Similarity 35.0%
Matches 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 89 amino acids
TYPE: amino acid
; TOPOLOGY: LINEAR; MOLECULE TYPE: PROTEIN US-08-208-339A-4
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MEDIUM TYPE: Floppy C
COMPUTER: IBM PC COMP
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ZIP: 20005-3934
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APPLICANT:
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US-08-722-719-6
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STATE:
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1 LVLLAVALQA-TEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTF 59
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APPLICANT: Wilde, Craig G.
APPLICANT: Wilde, Craig G.
APPLICANT: Bandman, Olga
APPLICANT: Bandman, Olga
TITLE OF INVENTION: EXPRESSED CHEWOKINES, THEIR
TITLE OF INVENTION: PRODUCTION AND USES
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: CA
                                                                                                                                                                                                                                                                                       Query Match 33.4%; Score 147.5; DB 4; Best Local Similarity 34.6%; Pred. No. 7.7e-12; Matches 28; Conservative 20; Mismatches 30;
CURRENT FILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: 60/022,591
PRIOR FILING DATE: 1996-07-25
PRIOR APPLICATION NUMBER: PCT US 97/12931
PRIOR FILING DATE: 1997-07-24
NUMBER OF SEQ ID NOS: 62
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 40
LENGTH: 90
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COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FESTESON VERSION 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/347,492B
FILING DATE: 29-NOV-1994
APPLICATION NUMBER: 08/303,241
FILING DATE: 07-SEP-1994
APPLICATION NUMBER: 08/320,011
FILING DATE: 05-CCT-1994
ATTORNEY/AGERT INFORMATION:
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REGISTRATION NUMBER: 33,954
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEO ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 91 amino acids
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STRANDEDNESS: single
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MOLECULE TYPE: peptide
IMMEDIATE SOURCE:
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ORGANISM: Homo sapiens
US-09-230-637-40
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                                                           Length 91;
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                                                           Query Match 33.4%; Score 147.5; DB 1; Best Local Similarity 34.6%; Pred. No. 7.8e-12; Matches 28; Conservative 20; Mismatches 30;
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US-08-347-492B-12
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Sequence 3, Appli
Sequence 7, Appli
Sequence 43730, A
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Sequence 9, Appli
Sequence 29, Appli
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869.687 Million cell updates/sec
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1 LVLLAVALQATEAGPYGANM......EICADPRVFWVKMILNKLSQ
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/cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO1_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO1_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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US-09-811-088-2

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US-09-908-599-2

US-09-908-599-2

US-10-001-221A-3

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US-09-144-838-3

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US-09-334-923A-6

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US-09-834-795A-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Published_Applications_AA:*
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                            OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                    US-09-509-165A-2_COPY_12_93
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length
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214.5
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153
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Sequence 29, Appli Sequence 3, Appli Sequence 1, Appli Sequence 12, Appli Sequence 26, Appli Sequence 34, Appli Sequence 34, Appli Sequence 65, Appli Sequence 65, Appli Sequence 65, Appli Sequence 65, Appli Sequence 65, Appli Sequence 13, Appli Sequence 14, Appli Sequence 2, Appli Sequence 2, Appli Sequence 30, Appli Sequence 5, Appli Sequence 5, Appli Sequence 6, Appli	Sequence 3, Appil Sequence 20, Appl Sequence 31, Appl
US-09-634-794A-29 US-09-920-137A-8 US-10-158-366-5 US-10-057-275-8 US-10-293-705-12 US-09-172-366-6 US-09-144-838-6 US-09-134-928-28 US-09-334-928-34 US-09-334-923A-65 US-10-114-482-3 US-09-334-923A-65 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-334-923A-2 US-09-332-348-5 US-09-372-348-5 US-09-372-348-7 US-09-372-348-7 US-09-372-348-7 US-09-372-348-7 US-09-372-348-7 US-09-372-348-7	US-U9-144-838-5 US-08-927-939-20 US-09-834-795A-31
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## ALIGNMENTS

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RESULT 1

US-09-837-446-6

US-09-837-446-6

Sequence 6, Application US/09837446

Patent No. US20020019341A1

SEQUENCE 1 PROFESTION:

APPLICANT: Campbell, James J.

APPLICANT: Campbell, James J.

APPLICANT: Campbell, James J.

APPLICANT: Mu, Lijan

TITLE OF INVENTION: Modulation of Systemic Memory T Cell

TITLE OF INVENTION: Modulation of Systemic Memory T Cell

TITLE OF INVENTION: Modulation of Systemic Memory T Cell

TITLE OF INVENTION: Modulation of Systemic Memory T Cell

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TITLE OF INVENTION: Modulation of Systemic Memory T Cell

TITLE OF INVENTION: Modulation of Systemic Memory T Cell

TITLE OF INVENTION: Modulation of Systemic Memory T Cell

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RESULT 2 US-09-811-088-2

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100.0%; Pred. No. 2.4e-46;
11ve 0; Mismatches 0;
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Pred. No. 9.6e-46;
1; Mismatches 0;
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SEIBUL, GEORGE
TITLE OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: HUMAN GENOME SCIENCES, INC. STREET: 9410 KEY WEST AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/908,599
CURRENT FILING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: 094432,768
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1996-11-05
PRIOR FILING DATE: 1996-12-05
NUMBER OF SEQ ID NOS: 22
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: L1, Haodong et al.
TITLE OF INVENTION: Human Chemokine Beta 13
FILE REFERENCE: PF177P3
                             PRIOR FILING DATE: 1999-07-16
PRIOR APPLICATION NUMBER: US 08/938,365
PRIOR FILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 93
     PRIOR APPLICATION NUMBER: US 09/354,809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DKEICADPRVPWVKMILNKLSQ 82
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Best Local Similarity 100.
Matches 82; Conservative
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Best Local Similarity 98.8
Matches 81; Conservative
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                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens
US-10-314-410-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-908-599-2
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                                                                                                                                APPLICANT: Pan, Yang
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: PROGNASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
TITLE OF INVENTION: USES
FILE REFERENCE: 07334-324001
CURRENT APPLICATION NUMBER: US 09/712,726
PRIOR APPLICATION NUMBER: US 08/820,364
PRIOR FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: US 09/757,421
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: US 08/843,652
PRIOR FILING DATE: US 08/843,651
PRIOR PELICATION NUMBER: US 08/843,651
PRIOR PELICATION NUMBER: US 08/843,651
PRIOR PELICATION NUMBER: US 08/354,809
PRIOR FILING DATE: 1999-07-16
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APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES
TITLE OF INVENTION: UNBER: US/09/811,088
PRIOR FILING DATE: 2000-11-14
PRIOR FILING DATE: 2000-11-12
PRIOR FILING DATE: US 09/72,7421
PRIOR FILING DATE: US 09/757,421
PRIOR FILING DATE: US 08/843,652
PRIOR FILING DATE: US 08/843,651
PRIOR PLING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 441; DB 11;
Best Local Similarity 100.0%; Pred. No. 2.4e-46;
Matches 82; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 DKEICADPRVPWVKMILNKLSQ 82
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Sequence 2, Application US/09811088 Patent No. US20020160446A1
                                                  GENERAL INFORMATION:
APPLICAWY: Holtzman, Douglas A.
APPLICAWY: Gearing, David P.
APPLICANY: Pan, Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens US-09-811-088-2
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Sequence 47379. Application US/09864761
Fatent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Penn, Sharron G.
APPLICANT: Penn, Sharron G.
APPLICANT: Penn, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO.
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acondica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
FRIOR PRILING DATE: 2000-02-04
PRIOR FILING DATE: 2000-02-26
PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 2000-09-27
PRIOR PRILING DATE: 2000-09-27
PRIOR PRILING DATE: 2000-09-27
PRIOR PRILING DATE: 2000-09-27
PRIOR PRILING DATE: 2000-09-07
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR PRILING DATE: 2000-01-30
PRIOR PRILING DATE: 2000-01-30
                                                                                                                RESULT 7

1S-10-001-221A-7

1S-10-001-221A-7

Sequence 7, Application US/10001221A

Sequence 7, Application No. US20030108515A1

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Well Premack, Brett Howard, Maureen

TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE

CURRENT PAPLICATION NUMBER: US/10/001,221A

CURRENT FILING DATE: 2001-10-30

PRIOR APPLICATION NUMBER: 09/834,814

PRIOR FILING DATE: 2001-030

PRIOR APPLICATION NUMBER: 09/834,814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22 DSV-----CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI 76
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APPLICATION NUMBER: PCT/US01/00669
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 2001-01-30 APPLICATION NUMBER: PCT/US01/00664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Chimeric molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 48.6%
Best Local Similarity 58.5%
Matches 38; Conservative
74 KMILNKLS 81
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61 KKLLHKLS 68
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63 LHKLS 67
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Sequence 3, Application US/20031010815A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Zheng, Wel Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REPRENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
FRIOR PILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 3
LENGTH: 68
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                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <UNKnown>
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64.7%; Pred. No. 2.1e-25;
tive 15; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 436; DB 10;
Pred. No. 9.6e-46;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEPAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 aning acids
                                                                                                                   COMPUTER: IBM PC COmpatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA: APPLICATION NUMBER: 09/484,221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98.98;
98.88;
                                                                COMPUTER READABLE FORM:
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Best Local Similarity 98.8°
Matches 81; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
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Best Local Similarity 64.7
Matches 44; Conservative
                    COUNTRY: 20850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-001-221A-3
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Gaps

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Best Local Similarity 40.89
Matches 29; Conservative
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US-09-334-923A-6
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TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation CURRENT APPLICATION NUMBER: US/09/144,838A CURRENT FILING DATE: 1998-08-31
EARLIER APPLICATION NUMBER: US 60/057,620
EARLIER FILING DATE: 1999-09-04
NUMBER OF SEQ ID NOS: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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N: EXPRESSED IN LUNG, SIGNAL = 0.79
N: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
N: EXPRESSED IN FETAL LIVER, SIGNAL = 0.66
N: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
N: EXPRESSED IN ADULT LIVER, SIGNAL = 0.7
N: EXT-HUMAN HIT: W61220.1, EVALUE 8.50e-01
N: SWISSPROT HIT: 000626, EVALUE 3.00e-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 43730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 ANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGV 54
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100.0%; Pred. No. 5.4e-19;
tive 0; Mismatches 0;
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42.9%; Pred. No. 2.3e-11;
tive 17; Mismatches 15;
             PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00668
PRIOR PELING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00663
PRIOR PILING DATE: 2001-01-30
PRIOR PLICATION NUMBER: PCT/USO1/00662
PRIOR PLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00670
PRIOR PLING DATE: 2000-09-31
PRIOR PLING DATE: 2000-06-30
PRIOR PLING DATE: 2000-06-30
PRIOR PLING DATE: 2000-06-30
PRIOR PLING DATE: 2010-01-29
APPLICATION NUMBER: PCT/US01/00665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application US/09144838A Patent No. US20020051996A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.(
Matches 37; Conservative
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Best Local Similarity 42.9
Matches 24; Conservative
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ORGANISM: Homo sapiens
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OTHER INFORMATION:
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OTHER INFORMATION:
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Sequence 6, Application US/09334923A

Sequence 6, Application US/09334923A

Batent No. US20020061551A1

GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
APPLICANT: L1, Haodong
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As America OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As America OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As America OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As America OF INVENTION: MUMBER: US 08/208,339

PRIOR FILING DATE: 1994-03-06

PRIOR FILING DATE: 1995-06-06

PRIOR FILING DATE: 1996-09-30

WHOBER OF SEQ ID NOS: 65

SEQ ID NOS: 65

SEQ ID NOS: 65

SEQ ID NOS: 65
                                                                                                                                                                                                                   Sequence, Application US/10001221A
Sequence No. US2003108515A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TILE OF INVENTION:
TILE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT FILING DATE: 2001-10-30
PRIOR PILICATION NUMBER: 09/834,814
SOUTH APPLICATION NUMBER: 09/834,814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 GPYGANMEDSVCCRDYVRYRLPL-RVVKHFYWTSDSCPRPGVVL-LTFRDKEICADPRVP 71
80
                                          12 CCYGFQQHPPPVQILKEWYPTSPACPKPGVILLTKRGRQICADPSKNWVRQLMQRL 67
   25 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL
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40.8%; Pred. No. 3.3e-11;
tive 16; Mismatches 24;
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Pred. No. 5.1e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Chimeric molecule US-10-001-221A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Artificial sequence
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35.0%;
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Best Local Similarity
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US-08-927-939-21; Sequence 21, Application US/08927939; Publication No. US20010006640A1; GENERAL INFORMATION:
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                                                                                                                                                                                                                                        61 DKEICADPRVPWVKMILNKL 80
                                                                                                                                                                                                                                                                   APPLICANT: Grainger, David J. APPLICANT: Tatalick, Lauen Marie
                                                               34.2%;
35.0%;
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                                                                                   Best Local Similarity 35.0%
Matches 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 34.6
Matches 28; Conservative
  ; ORGANISM: Homo sapiens US-09-925-302-792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens US-08-927-939-21
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LENGTH: 91
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LENGTH: 91
                                                                 Query Match
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APPLICANT: Ruben, Steven M.
APPLICANT: Li, Hacdong
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynuclectides
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynuclectides
TITLE OF INVENTION: (As Amended)
FILE REFERENCE: 1488.033000C
CURRENT APPLICATION NUMBER: US/09/334,954A
CURRENT FILING DATE: 1999-06.17
PRIOR FILING DATE: 1994-03-08
PRIOR FILING DATE: 1994-03-08
PRIOR FILING DATE: 1994-03-08
PRIOR FILING DATE: 1994-03-08
                                                               1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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2; Gaps
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Patent No. US20020044941A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies:
FILE REFERENCE: PA104
CURRENT APPLICATION NUMBER: US/09/925,302
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05918
PRIOR FILING DATE: 1999-03-12
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 896
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  Indels
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  33;
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34.2%; Score 151; DB 10;
Best Local Similarity 35.0%; Pred. No. 5.1e-11;
Matches 28; Conservative 17; Mismatches 33;
28; Conservative 17; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1995-05-05
PRIOR PAPLICATION NUMBER: US 08/465,682
PRIOR FILING DATE: 1995-06-06
PRIOR APPLICATION UNMBER: US 08/468,775
PRIOR APPLICATION UNMBER: US 08/725,719
PRIOR APPLICATION NUMBER: 1996-06-06
                                                                                                                                                                                                                                                                                Sequence 6, Application US/09334954A Patent No. US20020076746A1
                                                                                                                              61 DKEICADPRVPWVKMILNKL 80
                                                                                                                                                           66 GRQICADPNKKWVQKYISDL 85
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn Vel
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US-09-925-302-792
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SEQ ID NO 792
  Matches
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Sequence 9, Application US/09144838A

Sequence 9, Application US/09144838A

Sequence 9, Application US/0051996A1

GENERAL INFORMATION:

APPLICANT: Siani, Michael A.

APPLICANT: Siani, Michael A.

APPLICANT: Siani, Michael B.H.

APPLICANT: Stephon B.H.

TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation

FILE REFERENCE: GEN-020/01US

CURRENT APPLICATION NUMBER: US/09/144,838A

CURRENT PILING DATE: 1998-08-31

EARLIER APPLICATION NUMBER: US 60/057,620

SAFLIER PILING DATE: 1997-09-04

NUMBER OF SEQ ID NOS: 54

SOFTWARE: Patentin Ver. 2.1
                                                                                                                  1 LVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                                                                                                 16 LLVLVCTMALCSCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKR 73
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                                                            Gaps
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Length 97;
                                                         33; Indels
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Score 151; DB 10;
Pred. No. 5.6e-11;
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                                                         17; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      33.4%; Score 147.5;
34.6%; Pred. No. 1.4e
Live 20; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Compounds and methods to TITLE OF INVENTION: compounds and inflammatory FILE REFERENCE: 295.0220S1 CURRENT APPLICATION NUMBER: US/08/927,939 CURRENT FILIGE DATE: 1997-09-11 NUMBER OF SEC ID NOS: 83 SOFTWARE: FASTSEQ for Windows Version 3.0
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3; Gaps
Query Match
Best Local Similarity 34.6%; Pred. No. 1.4e-10;
Matches 28; Conservative 20; Mismatches 30; Indels 3;
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60 RDKEICADPRVPWVKMILNKL 80
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68 KNRQVCANPEKKWVREYINSL 88

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Search completed: July 28, 2003, 04:20:04 Job time: 11.1975 secs

Title: Perfect score: Sequence:

Run on:

Scoring table:

Searched:

Database

Result

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sequence 2, Appli
Sequence 2726, A
Sequence 2007, Ap
Sequence 2007, App
Sequence 2007, Appli
Sequence 2, Appli
Sequence 25, Appli
Sequence 25, Appli
Sequence 25, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 10, Application US/08925857

GENERAL INFORMATION:

APPLICANT: GOTTMEN, Daniel M.

APPLICANT: Zlotnik, Joseph A.

APPLICANT: Zlotnik, Albert

TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: DNAX Research Institute

STRATE: California Avenue

CITY: Palo Alto

STRATE: California

COUNTY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PATCHIN Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925,857 FILING DATE: 09-SEP-1997 CLASSIFICATION: 436 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/025,724 FILING DATE: 10-SEP-1996 ATTORNEY/AGENT INFORMATION:
US-08-820-364-2
US-08-925-857-12
US-08-931-7648-2
US-08-931-7648-2
US-08-931-107-2
US-09-067-447-2
US-09-067-4478-2
US-09-509-165A-2
US-09-511-992-2
US-09-712-726-2
US-09-711-726-2
US-09-711-726-2
US-09-711-726-2
US-09-711-088-2
US-09-811-088-2
                                                                                                                                                                                           US-09-760-476-2007
US-09-760-481-204
US-10-216-245-2007
US-10-216-388-204
US-10-217-651-449
PCT-USO0-30237-2
                                                                                                                                                                                                                                                                                      US-09-432-768-2
US-09-484-221-2
US-09-908-600-2
US-09-908-600-2
US-10-137-438-2
US-09-067-447-41
US-09-067-447-41
US-09-067-165A-41
US-09-051-65A-41
US-09-558-658-25
                                                                                                                                                                                                                                                                            US-08-986-188-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RY: USA
94304-1104
  Sequence 6, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 3, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seguence 10, Appl
                                                                                                               (without alignments)
562.075 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                            July 28, 2003, 04:00:39; Search time 94.0588 Seconds
                                                                                                                                                                              1 LVLLAVALQATEAGPYGANM.......EICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                     ptodata/1/paa/US101_COMB.pep:
ptodata/1/paa/US102_COMB.pep:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /cgn2_6/ptodata/1/paa/US60_COMB.pep:*
               GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-464-594-2
US-08-479-620-2
US-08-558-658-2
US-08-760-127-3
                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-925-857-10
PCT-US00-00953-6
                                                                                                                                                                                                                                                 4569144 seqs, 644733110 residues
                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                    OM protein - protein search, using sw model
                                                                                                                                                    US-09-509-165A-2_COPY_12_93
                                                                                                                                                                                                                                                                                                                                                                                                    Pending_Patents_AA_Main:*
                                                                                                                                                                                                         BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Match
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100.0
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STATE: NEW JERSEY
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                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-464-594-2
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US-08-479-620-2
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                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                 Length 86;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 6, Application PC/TUS0000953
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijan
ITILE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
ITILE OF INVENTION: C CHEMOKINE RECEPTOR AND ITS LIGAND
ITILE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING
FILE REFERENCE: SUN-110PRV
CURRENT APPLICANTION NUMBER: PCT/USO0/00953
CURRENT FILING DATE: 2000-01-14
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FASLSED for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                             Ouery Match 100.0%; Score 441; DB 13; Best Local Similarity 100.0%; Pred. No. 1.9e-47; Matches 82; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART 6 OLSTEIN STREET 6 BECKER FARM ROAD CITY: ROSELAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/08464594
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                            DX0614K
                                                                                                                                                                                                                                                                                                                                                                                                                                                       65 DKEICADPRVPWVKMILNKLSQ 86
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                                    REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEFHONE: 650-852-9196
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENTH: 86 amino acids
NAME: Ching, Edwin P. REGISTRATION NUMBER: 34,090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82; Conservative
                                                                                                                                                                                                                ; MOLECULE TYPE: protein US-08-925-857-10
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ORGANISM: Homo sapiens
                                                                                                                                                                              amino acid
GY: linear
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Matches 82; Conserve
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1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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; Pred. No. 2.1e-47;
0; Mismatches 0;
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TELECOMMUNICATION INFORMATION:
ZIP: 07068

COMPUTER READALE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
COPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,594
FILING DATE: June 5, 1995
CLASSIFICATION A73
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     325800-443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              72 DKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFRENCE/DOCKET NUMBER: 325
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 82; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201-994-1744
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1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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  12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 93;
                                                                                                                                                                                                                                            APPLICANT: Chang, Ming-shi
APPLICANT: Andrew, David P.
TITLE OF INVENTION: NOVEL PROTEIN WITH CHEMOKINE ACTIVITY
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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GENERAL INFORMATION:
APPLICANT: Gearing, David P.
APPLICANT: Gearing, THYMOTAXIN AND USES THEREFOR NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/760,127
FILING DATE: 03-DEC-1996
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Whiteford, Wendy A.
REGISTRATION NUMBER: 36,964
REFERENCE/DOCKET NUMBER: A-429
TELECOMMUNICATION INFORMATION:
TELEPHONE: (805) 447-1008
TELEPHONE: (805) 447-1008
TELEPHONE: (805) 447-1008
TELEPHONE: (805) 447-1008
TELEPHONE: CRARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                               82
                                                                                    72 DKEICADPRVPWVKMILNKLSO 93
                                                                                                                                                                                                                                                                                                                                                    E: Amgen Inc.
1840 De Havilland Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 DKEICADPRVPWVKMILNKLSQ 82
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                                                               DKEICADPRVPWVKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                  CITY: Thousand Oaks
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                             California : U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 91320
                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-760-127-3
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STATE:
                                                               61
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                                                                                                                                                                                                                                                                    Gaps
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APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 25
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ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                    Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENY APPLICATION DATA:
APPLICATION NUMBER: US/08/558,658
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2.1e-47;
                                                                                                                                                                                                                       Query Match
100.0%; Score 441; DB 8;
Best Local Similarity 100.0%; Pred. No. 2.1e-47;
Matches 82; Conservative 0; Mismatches 0;
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                        61 DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/08558658 GENERAL INFORMATION:
312/474-6300
312/474-0448
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Best Local Similarity 100.0
Matches 82; Conservative
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INFORMATION FOR SEQ ID NO:
                                      TELEX: 25-3856
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                                                                        TYPE: amino acid
TOPOLOGY: linear
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  TELEPHONE:
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                     TELEFAX:
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                                                                                                     LENGTH:
                                                                                                                        TYPE:
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Gaps ö

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APPLICANT: Devico, Anthony L.
APPLICANT: Pal, Ranajit
APPLICANT: Gallo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC)
TITLE OF INVENTION: AN ANTI-HIV AGENT FOR THE TREATMENT AND PREVENTION
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
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2.1e-47;
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100.0%; Pred. No. 2.1e-47;
ive 0; Mismatches 0;
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ilarity 100.0%; Pred. No. 2.1
Conservative 0; Mismatches
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STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPAIDLE
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ VERSION 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/931,764
FILING DATE: TO be assigned
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAMME: MISROCK, S. Leslie
REGISTRATION NUMBER: 18,872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72 DKEICADPRVPWVKMILNKLSQ 93
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TELECOMMUNICATION INFORMATION:
TELEFONE: 212-790-9090
TELEFAX: 212-869-8864
TELEX: 66141 PENNIE
INFORMATION FOR SEO ID NO: 2:
                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
TELEFAX: 650-496-1200
      REFERENCE/DOCKET NUMBER:
                                                                                                               INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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Best Local Similarity 100.(
Matches 82; Conservative
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                                                                                                                                                                                                                                   ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-925-857-12
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Best Local Similarity
Matches 82; Conserv
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STATE:
                                                                                                                                                                                                                TYPE:
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GENERAL INFORMATION:
APPLICANT: Gorman, Joseph A.
APPLICANT: Edutik, Joseph A.
APPLICANT: Zlotnik, Albert
TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: DNAX Research Institute
STREET: 901 California Avenue
CITY: Palo Alto
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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SUBTRARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925,857
FILING DATE: 09-SEP-1997
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/025,724
FILING DATE: 10-SEP-1996
ATTONREY/AGENT INPORMATION:
NAME: CALCA CAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; DB 12;
2.1e-47;
hes 0;
                                                           MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/820.344
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Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Meiklejóhn, Ph.D., Anita L.
RECISTRATION NUMBER: 35,283
REFERENCE/DOCKET NUMBER: 07334/023001
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12-mar: US/08/820,364
12-Mar-1997
0N: 536
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 617-542-8906
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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                                                                                                                                                                                                                                                               FILING DATE: 12-MAR-1
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-820-364-2
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MEDIUM TYPE: Floppy
                                                       COMPUTER READABLE FORM:
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94304-1104
                           02110-2804
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US-08-925-857-12
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COUNTRY:
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APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC
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STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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APPLICATION NUMBER: US/09/067,447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 441; DB 13
100.0%; Pred. No. 2.1e-47
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                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
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COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATING
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 DKEICADPRVPWVKMILNKLSQ 82
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558 FEOFELING NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA: APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA: APPLICATION NUMBER: 08/939,107
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TELEFAX: 312/
TELEX: 25.3856
INFORMATION FOR SEQ.
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
""PE: amino acid
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall,
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
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APPLICANT: Gray, Partick W.
APPLICANT: RAPOrt, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT
CORRESPONDENCES: 40
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                         Sequence 2, Application US/08931764B
; Sequence 2, Application US/08931764B
; GENERAL INFORMATION:
    APPLICANT: Devico, Anthony L.
    APPLICANT: Devico, Anthony L.
    APPLICANT: Devico, Anthony L.
    APPLICANT: Markham, Phillip D.
    APPLICANT: Marzino-Demo, Alfredo
    TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-Viral
    TITLE OF INVENTION: Infection
    TITLE OF INVENTION: Infection
    TITLE OF INVENTION: Infection
    TITLE OF INVENTION: Infection
    TITLE OF INVENTION: OF INVENTION: Infection
    TITLE OF INVENTION: OF INVENTION: Infection
    TITLE OF INVENTION: Infection
    TITLE OF INVENTION: OF INVENTION: Infection
    TITLE OF INVENTION

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                                                               12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
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                          1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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CITATE: Lilinois
STATE: Illinois
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 441; DB 13; Best Local Similarity 100.0%; Pred. No. 2.1e-47; Matches 82; Conservative 0; Mismatches 0;
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APPLICATION NUMBER: US/08/939,107
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                                                                                                                                                      61 DKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                       72 DKEICADPRVPWVKMILNKLSQ 93
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US-08-931-7648-2
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CLASSIFICATION:
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APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
TILE REFERENCE: 27866/34404
CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: 08/660,542
EARLIER RILING DATE: 1995-06-07
EARLIER APPLICATION NUMBER: 08/568,658
EARLIER APPLICATION NUMBER: 08/558,658
EARLIER PELING DATE: 1995-11-16
EARLIER FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 44
SEGURANDER: PATRING DATE: 1995-06-07
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100.0%; Pred. No. 2.1e.47;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                     LOCATION:

OTHER INFORMATION: /note = "human MDC"

US-09-067-447-2
                                                        27866/34404
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NAME: Gass, David A. REGISTATION UNBER: 38,153
REFERENCE/DOCKET NUMBER: 2766f
TELECOMMUNICATION INFORMATION:
TELEFAN: 312/474-6300
TELEFAX: 25-3856
INFORMATION FOR SECIED IO: 2;
                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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Best Local Similarity 100.0
Matches 82; Conservative
                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: protein FEATURE:
                                                                                                                                                                                                                                                     amino acid
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LENGTH: 93
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APPLICANT: Gray, Patrick W.
APPLICANT: Chantry, David H.
APPLICANT: Chantry, David H.
APPLICANT: Deeley, Michael C.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MD=
TITLE OF INVENTION: ACTIVITY
NUMBER OF SEQUENCES: 40
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                                                                                                                                                                                                                                    ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                 STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 441; DB 14;
100.0%; Pred. No. 2.1e-47;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: /note - "human MDC" US-09-067-447B-2
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION NUMBER: 08/58,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/79,620
FILING DATE: 16-NOV-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34
TELEPRONE: 312/414-6300
TELEPRONE: 312/414-6300
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CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
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                Sequence 2, Application US/09067447B GENERAL INFORMATION:
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Best Local Similarity 100.0
Matches 82; Conservative
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93 amino acids
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                                                                                                                                                                                                     NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
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US-09-067-447B-2
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RESULT 15
GENERAL INFORMATION:
Sequence 2, Application US/09509165A
SEGUREAL INFORMATION:
THIS OF INVENTION:
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
TITLE OF INVENTION: UNHIBER 108/09509,165A
CURRENT PELLIAND WINDER: US/09509,165A
CURRENT PELLIAND MUNERE: 09/067,447
PRIOR APPLICATION NUMBER: 09/067,447
PRIOR APPLICATION NUMBER: 09/067,447
PRIOR APPLICATION NUMBER: 09/067,447
PRIOR APPLICATION NUMBER: 08/0458,658
PRIOR PRIOR APPLICATION NUMBER: 08/0479,620
PRIOR APPRICATION NUMBER: 08/0479
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July 28, 2003, 04:02:59; Search time 28.9412 Seconds (without alignments) 748.942 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                      441
1 LVLLAVALQATEAGPYGANM......EICADPRVPWVKMILNKLSQ
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/cgn2_6/ptodata/2/paa/USO6_NEW_COMB. pep:*
/cgn2_6/ptodata/2/paa/USO7_NEW_COMB. pep:*
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/cgn2_6/ptodata/2/paa/USO9_NEW_COMB. pept:*
/cgn2_6/ptodata/2/paa/USO9_NEW_COMB. pept:*
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/cgn2_6/ptodata/2/paa/USO9_NEW_COMB. pept:*
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                  OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 2000000000
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Sequence 2, Appli Sequence 8659, Ap Sequence 8659, Ap Sequence 4765, Ap Sequence 4765, Ap Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 5105, Ap Sequence 2, Appli Sequence 146, A Sequence 473, A Sequence 549, A Sequence 638, A Sequence 640, A Sequence 641, A Description Sequence PCT-US02-40891-549 PCT-US02-40891-638 PCT-US02-40891-639 PCT-US02-40891-640 PCT-US02-40891-641 US-10-314-410-2 US-10-405-027-5105 US-10-285-572-2 US-10-137-438A-2 US-10-406-494-2 Length Query 100.0 100.0 100.0 100.0 100.0 100.0 100.0 Score Result

APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: 41 Human Secreted Proteins
FILE REFERENCE: PS740PCT
CURRENT APPLICATION NUMBER: PCT/US02/35606
CURRENT FILING DATE: 2002-11-06
PRIOR APPLICATION NUMBER: 60/331,046

Sequence 146, Application PC/TUS0235606 GENERAL INFORMATION:

RESULT 2 PCT-US02-35606-146

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Sequence 2, Appli Sequence 53, Appl Sequence 50, Appl Sequence 422, App Sequence 424, App Sequence 425, App Sequence 425, Appli Sequence 3, Appli Sequence 7, Appli Sequence 7, Appli Sequence 345, App Sequence 56, Appli Sequence 561, Appli Sequence 562, Appli Sequence 566, Appli Sequence 566, Appli Sequence 566, Appli Sequence 566, Appli Sequence 566, Appli Sequence 566, Appli Sequence 567, Appli	; Length 93; 7; Indels 0; Gaps 0;	LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60 
9 12. US-10-341-931-2 4 12 US-10-341-931-2 4 12 US-10-335-394-49 7 12 US-10-335-394-50 8 2 PCT-USO2-40891-257 8 2 PCT-USO2-40891-257 6 2 PCT-USO2-40891-423 6 2 PCT-USO2-40891-423 8 10 US-09-839-445-7 7 12 US-10-001-211A-7 7 12 US-10-001-211A-7 1 US-09-839-445-7 7 12 US-10-001-211A-7 7 12 US-10-001-211A-7 1 US-09-839-445-6 1 US-09-839-445-7 7 12 US-10-001-211A-7 8 12 US-001-211A-7 9 2 PCT-USO2-40891-565 9 2 PCT-USO2-35606 8 ALIGNMENTS ALIGNMENTS ALIGNMENTS ALIGNMENTS ALIGNMENTS ALIGNMENTS ALIGNMENTS ALIGNMENTS	; Score 441; DB 2; Pred. No. 1.9e-4 0; Mismatches	GANMEDSVCCRDYVRYRLPLRV 
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TYPE: PRT
ORGANISM:
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NUMBER OF SEQ ID NOS: 2222
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                                                                                                                                                                                                                                     Query Match 100.0%; Score 441; DB 2; Best Local Similarity 100.0%; Pred. No. 1.9e-47; Matches 82; Conservative 0; Mismatches 0;
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100.0%; Pred. No. 1.9e-47;
:Ive 0; Mismatches 0;
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TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PFS64PCT
CURRENT PELLOATION NUMBER: PCT/USO2/40891
CURRENT FILING DATE: 2002-12-23
PRIOR PELLOATION NUMBER: 60/341,811
PRIOR PELLING DATE: 2001-12-11
PRIOR PAPLICATION NUMBER: 60/360,000
PRIOR PILING DATE: 2002-02-8
PRIOR PELLING DATE: 2002-02-10
PRIOR PELLING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/38,950
PRIOR PELLING DATE: 2002-07-34
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR PELLING DATE: 2002-01-01
PRIOR PELLING DATE: 2002-10-02
PRIOR PELLING DATE: 2002-10-11
PRIOR PELLING DATE: 2002-10-11
PRIOR PELLING DATE: 2002-10-11
PRIOR FILING DATE: 2002-10-11
PRIOR FILING DATE: 2002-10-11
PRIOR FILING DATE: 2002-10-13
PRIOR FILING DATE: 2002-10-23
PRIOR FILING DATE: 2002-10-23
PRIOR FILING DATE: 2002-11-05
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Sequence 473, Application PC/TUSO240891
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 DKEICADPRVPWVKMILNKLSQ 82
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 160
SOFTWARE: Patentin Ver. 2.0
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Best Local Similarity 100.
Matches 82; Conservative
                                                                                                                                                   ORGANISM: Homo sapiens
PCT-US02-35606-146
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PCT-US02-40891-473
                                                                            SEQ ID NO 146
LENGTH: 93
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Pred. No. 1.9e-47;
Mismatches 0;
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GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT PLING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/340,000
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2002-02-18
PRIOR APPLICATION NUMBER: 60/378,950
PRIOR PILING DATE: 2002-05-10
PRIOR PILING DATE: 2002-05-10
PRIOR PILING DATE: 2002-05-10
PRIOR PILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-05-10
PRIOR PILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-07-14
                                                                          TITLE OF INVENTION: Albumin Fusion Proteins FILE REFERENCE: PF564PCT
                                                                                                                                           CURRENT APPLICATION NUMBER: PCT/US02/40891 CURRENT FILING DATE: 2002-12-23
                                                                                                                                                                CURRENT FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2002-02-38
PRIOR FILING DATE: 2002-03-40
PRIOR FILING DATE: 2002-07-44
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-01-11
PRIOR PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-02
PRIOR PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-13
PRIOR FILING DATE: 2002-11-05
Sequence 549, Application PC/TUS0240891 GENERAL INFORMATION:
                                                        APPLICANT: Human Genome Sciences, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DKEICADPRVPWVKMILNKLSQ 93
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Best Local Similarity 100.
Matches 82; Conservative
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NUMBER OF SEQ ID NOS:
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PCT-US02-40891-638
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1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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              12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: PF564FG:
CURRENT APPLICATION NUMBER: 00/341,811
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR PELICATION NUMBER: 60/341,811
PRIOR PLICATION NUMBER: 60/340,000
PRIOR FILING DATE: 2001-12-21
PRIOR PELICATION NUMBER: 60/376,000
PRIOR FILING DATE: 2002-05-26
PRIOR FILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-05-10
PRIOR PLICATION NUMBER: 60/396,008
PRIOR PLICATION NUMBER: 60/411,355
PRIOR PLICATION NUMBER: 60/411,355
PRIOR PLICATION NUMBER: 60/411,515
PRIOR PLICATION NUMBER: 60/417,611
PRIOR FILING DATE: 2002-10-11
PRIOR FILING DATE: 2002-10-11
PRIOR PLICATION NUMBER: 60/420,246
PRIOR PLICATION NUMBER: 60/420,246
PRIOR PLICATION NUMBER: 60/420,246
PRIOR PLICATION NUMBER: 60/420,246
PRIOR PLICATION NUMBER: 60/423,623
PRIOR PLICATION NUMBER: 60/423,623
PRIOR PLICATION NUMBER: 60/423,623
PRIOR PLICATION NUMBER: 60/231,360
PRIOR FILING DATE: 2002-11-05
PRIOR PLICATION NUMBER: 60/423,623
PRIOR PLICATION NUMBER: 60/231,360
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR PLICATION NUMBER: 60/423,623
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PRIOR FILING DATE: 2002-11-05
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PRIOR PLICATION NUMBER: 60/423,623
PRIOR FILING DATE: 2002-11-05
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Pred. No. 1.9e-47;
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FILE REFERENCE: PF564PCT
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-3
PRIOR PAPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR APPLICATION NUMBER: 60/360,950
PRIOR FILING DATE: 2002-02-8
PRIOR FILING DATE: 2002-05-10
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TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
                                                                                                                                                                                                                                                                                                                      Sequence 640, Application PC/TUS0240891 GENERAL INFORMATION:
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                                                                                                                72 DKEICADPRVPWVKMILNKLSQ 93
                                                                             61 DKEICADPRVPWVKMILNKLSQ
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100.0%;
Best Local Similarity 100.0%;
Matches 82; Conservative 0;
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PCT-US02-40891-640
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PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR PELICATION NUMBER: 60/423,623
PRIOR PELING DATE: 2002-11-05
PRIOR PELING DATE: 2002-01-05
PRIOR FILING DATE: 2002-01-28
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ 1D NOS: 222.
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SOFTWARE: Patentin Ver. 2.0
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100.0%; Pred. No. 1.9e-47;
Live 0; Mismatches 0;
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FILE REPERENCE: PFS64P2
CURRENT FILING DATE: 2002-12-23
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-02-8
PRIOR RELING DATE: 2002-05-8
PRIOR FILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-05-10
PRIOR FILING DATE: 2002-05-18
PRIOR FILING DATE: 2002-01-18
PRIOR FILING DATE: 2002-10-02
PRIOR FILING DATE: 2002-10-02
PRIOR FILING DATE: 2002-10-11
PRIOR FILING DATE: 2002-10-23
PRIOR FILING DATE: 2002-11-05
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Best Local Similarity 100.
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Matches 82; Conservative
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; ORGANISM: Homo sapiens
PCT-US02-40891-639
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Sequence 2, Application US/10445790

Sequence 2, Application US/10445790

Sequence 2, Application US/10445790

Sequence 2, Application US/10445790

APPLICANT: Garzino, Alfedo

TITLE OF INVENTOR: Immuno-Modulating Effects of Chemokines in DNA Vaccination

FILE REFERENCE: 4115-109 CIP DIV

CURRENT APPLICATION NUMBER: US/10/445,790

CURRENT APPLICATION NUMBER: PCT/US98/26291

PRIOR FILING DATE: 1098-12-11

PRIOR FILING DATE: 2000-03-02

PRIOR FILING DATE: 2000-03-02

PRIOR FILING DATE: 1090-12-06

PRIOR FILING DATE: 1997-12-11

NUMBER OF SEQ ID NOS: 7

SEQ ID NO 2

LENTH: 93

LENTH: 93
                                                                                                                                  1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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               Length 93;
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         Query Match 100.0%; Score 441; DB 12; Best Local Similarity 100.0%; Pred. No. 1.9e-47; Matches 82; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5105, Application US/10405027
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Human Secreted Proteins
FILE OF INVENTION: Human Secreted Proteins
FILE REFERENCE: PS806P1
CURRENT APPLICATION NUMBER: US/10/405,027
CURRENT FILING DATE: 2003-04-07
PRIOR APPLICATION NUMBER: 60/369,608
PRIOR FILING DATE: 2002-04-30
PRIOR FILING DATE: 2002-04-30
NUMBER OF SEQ ID NOS: 5810
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 5105
LENGTH: 93
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CORGANISM: Homo sapiens
US-10-405-027-5105
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APPLICANT: Holzaman, Douglas A.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES
TITLE OF INVENTION: USER: US/09/811,088
PRIOR REPLICATION NUMBER: US/09/811,088
PRIOR APPLICATION NUMBER: US 09/712,726
PRIOR PELING DATE: 2000-11-14
PRIOR APPLICATION NUMBER: US 09/772,421
PRIOR APPLICATION NUMBER: US 08/820,364
PRIOR PILING DATE: 1997-03-16
PRIOR PLING DATE: 1997-04-16
PRIOR PLING DATE: 1997-04-16
PRIOR FILING DATE: US 08/843,651
PRIOR FILING DATE: US 09/354,809
PRIOR FILING DATE: US 09/354,809
PRIOR FILING DATE: US 09/354,809
PRIOR FILING DATE: US 09/38,365
PRIOR FILING DATE: US 09/38,365
PRIOR FILING DATE: US 09/38,365
PRIOR FILING DATE: US 09/399-26
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PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-07-24
PRIOR PILING DATE: 2002-07-18
PRIOR PILING DATE: 2002-09-18
PRIOR PILING DATE: 2002-09-18
PRIOR PILING DATE: 2002-10-18
PRIOR PAPLICATION NUMBER: 60/41,984
PRIOR FILING DATE: 2002-10-10
PRIOR PAPLICATION NUMBER: 60/417,611
PRIOR PAPLICATION NUMBER: 60/420,246
PRIOR PILING DATE: 2002-10-23
PRIOR PILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR PILING DATE: 2002-11-05
PRIOR PILING DATE: 2002-11-05
PRIOR PILING DATE: 2002-11-08
PRIOR PILING DATE: 2002-11-08
PRIOR PILING DATE: 2002-10-28
PRIOR PILING DATE: 2002-11-08
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100.0%; Score 441;
Best Local Similarity 100.0%; Pred. No. 1
Matches 82; Conservative 0; Mismatche
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SOFTWARE: FastSEQ for Windows Version 4.0
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PCT-US02-40891-641
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US-10-314-410-2
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US-10-314-410-2
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APPLICANT: BEGOVICH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETE
FILE REFERENCE: CLO01468
CURRENT APPLICATION NUMBER: US/60/465,241
CURRENT FILING DATE: 2003-04-23
NUMBER OF SEQ ID NOS: 228418
SOFTWARE: FASTER OF MINDOWS VETSION 4.0
                                                                                                                                                                                                         WITH
                                                                                                                                                           APPLICANT: CARGILL, Michele APPLICANT: CARGILL, Michele APPLICANT: BEGOVICH, Ann TITLE OF INVENTION: RENETIC POLYMORPHISMS ASSOCIATED TITLE OF INVENTION: REDUMATOID ARTHRITIS, METHODS OF FILE REFERENCE: CLO01455 CURRENT APPLICATION NUMBER: US/60/455,444 CURRENT FILING DATE: 2003-03-18 NUMBER OF SEQ ID NOS: 50986 SOFTWARE: FASTSEQ for Windows Version 4.0
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100.0%; Pred. No. 1.9e-47;
ative 0; Mismatches 0;
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Job time: 28.9412 secs
                                                                                                   US-60-455-444-4765; Sequence 4765, Application US/60455444; GENERAL INFORMATION:
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  72 DKEICADPRVPWVKMILNKLSO
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Best Local Similarity 100.
Matches 82; Conservative
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US-60-465-241-4765
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LENGTH: 93
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                                                                                                                                                                                                                                                                                                     Sequence 8659, Application US/60453135
GENERAL INFORMATION:
APPLICANT: CAGGILL, Michele
APPLICANT: ARGUBOVA, Olga
TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLO01456
CURRENT APPLICATION NUMBER: US/60/453,135
CURRENT FILIG DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
SOFTWARE: FastSeQ for Windows Version 4.0
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TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND US
FILE REFERENCE: CLOO1457
CURRENT APPLICATION NUMBER: US/60/453,050
CURRENT FILING DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
SOFTWARE: FASLEEQ for Windows Version 4.0
SEQ ID NO 8659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 441; DB 14;
100.0%; Pred. No. 1.9e-47;
ive 0; Mismatches 0;
100.0%; Score 441; DB 12; 100.0%; Pred. No. 1.9e-47;
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                                          Mismatches
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; APPLICANT: CARGILL, Michele
                                                                                                                                                                                    61 DKEICADPRVPWVKMILNKLSO 82
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                   Best Local Similarity 100.
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Matches 82; Conservative
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Matches 82; Conservative
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US-60-453-135-8659
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US-60-453-050-8659
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

July 28, 2003, 04:01:18 ; Search time 8.09664 Seconds (without alignments) 973.617 Million cell updates/sec Run on:

Title: Perfect score: Sequence:

US-09-509-165A-2\_COPY\_12\_93
441
1 LVLLAVALQATEAGPYGANM......EICADPRVPWVKMILNKLSQ

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283224 segs, 96134422 residues Searched:

283224 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

1: pirl:\* 2: pir2:\* 3: pir3:\* 4: pir4:\* PIR\_73:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

	chemoattr	nflamm	emoattr	inflamm	nflamm	emotact	inflamm	inflamm	protein	chemoattr	chemotact	chemoattr	chemoattr	emoattr -	ırly se	emoattr	ration	ursor	ole JE	nerence	nom pu	emoattr	protein -	chemoattr	ursor	precursor	precu	n prec	nom - t
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OI	A28815	152322	A46539	A32393	A31767	JC5295	A30574	C30552	B35673	148147	A54678	A39296	JC2336	A60299	S07723	JC2417	146730	JC4912	A30209	C60407	<b>JE0177</b>	JC2136	I49555	146857	I48099	JC2478	ETHUL	A37236	S24236
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& Query Match	33.4	32.2	31.6	29.9	29.8	29.5	29.3	29.0	28.1	27.4	27.1	25.6	25.6	25.2	24.9	24.7	24.6	24.6	23.2	•	•	21.8	21.7	21.2	21.1	20.9	20.5	19.7	19.2
Score	147.5	142	139.5	132	131.5	130	129	128	124	121	119.5	113	113	111	110	109	108.5	108.5	102.5	σ	96.5	96	95.5		93	o	90.5	ω	84.5
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ò g RESULT 2 I52322

macrophage inflammatory protein-lalpha - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 29-May-1998 #sequence\_revision 29-May-1998 #text\_change 16-Jul-1999
C;Date: 29-May-1998 #sequence\_revision 29-May-1998 #text\_change 16-Jul-1999
C;Accession: 152322
R;Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Biochem. Biophys. Res. Commun. 211, 289-295, 1995
Biochem. Biophys. Res. Commun. 211, 289-295, 1995
A;Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat
A;Reference number: 152322
A;Reference number: 15322
A;Reference number: issue in GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-92 <RES>

monocytic cytokine lymphotactin precu monocyte chemotact meutrophil-activat cytokine SDF-1-bet platelet factor 4 transformation-ind RSV-1nduced protei pre-B-cell growth- interleukin-8 homo cytokine - mouse C-Y-C chemokine LI platelet basic pro alveolar macrophag interleukin-8 - do
A48093 ETMSL A55984 A55010 G01540 A26774 A26774 A26736 I53416 I53416 I81182 A57325 A57325 A57325 A1881 B44253 JNO841
0.0000000000000000000000000000000000000
97 114 114 114 105 103 103 103 103 113 113 113 117 117
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
8 2 4 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8
. O H C K 4 K 9 K 9 K 9 K 9 K 9 K 9 K 9 K 9 K 9

## ALIGNMENTS

RE A2	RESULT 1 A28815
E N	monocyte chemoattractant cytokine RANTES precursor - human N;Alternate names: small inducible cytokine A5; T-cell specific cytokine RANTES
ö	C.Species: Homo sapiens (man)
ن ز	C;Date: 30-Jun-1989 #sequence_revision 16-Aug-1996 #text_change 29-May-1998 C:Arcession: A28815
i ii	Schall, T.J.; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.K.;
	J. Immunol. 141, 1018-1025, 1988
À À	A/IItle: A numan T cell-specific molecule is a member of a new gene ramily. A;Reference number: A28815; MUID:88285659; PMID:2456327
Α;	A; Accession: A28815
Α;	A; Molecule type: mRNA
À,	Residues: 1-91 (SCH)
₹ ċ	**/*/LOSS*TETELEHIEDS: USB.MILILS.** **Comment: The acronum RAWIPS reflects the description "Remilated upon Activation. No
ပ်	Cigenetics:
Α;	A; Gene: GDB: SCYA5; D17S136E
A;	A; Cross-references: GDB:120749; OMIM:187011
A;	A;Map position: 17q11.2-17q12
ပ်	C;Superfamily: macrophage inflammatory protein
ပဲ	C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation; T-cell
F.;	F;1-23/Domain: signal sequence #status predicted <sig></sig>
ъ;	F;24-91/Product: T-cell protein RanTES #status predicted <mat></mat>
	Query Match 33.4%; Score 147.5; DB 1; Length 91;
	Best Local Similarity 34.68; Pred. No. 1.6e-10;
	edpo 'c croput
Qy	1 LVLLAVALQA-TEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTF 59
QQ	

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macrophage inflammatory protein-1-alpha precursor - mouse
N;Alternate names: heparin-binding chemotaxis protein; L2G25B protein; SCI/MIP-1a; =C;Specias: Mus musculus (house mouse)
C;Specias: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 16-Jul-1999
C;Accession: S11685; A32393; S04533; A53885; A30552; PS0303; A27596; I56104
R;Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.
Nucleic Acids Res. 18, 5561, 1990
A;Title: Sequence of the murine haemopoletic stem cell inhibitor/macrophage inflamm_t
A;Reference number: S11685; MUID:91016858; PMID:2216738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:X53372; NID:954062; PIDN:CAA37452.1; PID:9297531
A;Note: the authors' translation of the nucleotide sequence differs at several posi 1
R;Kwon, B.S.; Welseman, S.M.
Proc. Natl. Acad. Scl. U.S.A. 86, 1963-1967, 1989
A;Title: cDNA sequence of two inducible T-cell genes.
A;Title: cDNA sequence of two inducible T-cell genes.
A;Reference number: A32393; MUID:89184547; PMID:2784565
A;Accession: A32393
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
. Immunol. 142, 679-687, 1989
:Title: A family of small inducible proteins secreted by leukocytes are members o⊟a
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A;Accession: A27596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Molecule type: mRNA

;Residues: 1-92 <kWo>

;Cross-references: GB:J04491; NID:g201524; PIDN:AAA40304.1; PID:g201525

;Davatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos,

Exp. Med. 167, 1939-1944, 1988

:Exp. Med. 167, 1939-1944, 1988

:Title: Cloning and characterization of a cDNA for murine macrophage inflammatory

;Reference number: S04533; MUID:88258380; PMID:3290382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: mRNA
A;Residues: 1-21, ".23-61,'A',63-92 <BRO>
A;Cross-references: GB:M21447; NID:9533240; PIDN:AAA40146.1; PID:9533241
R;Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D
J. Exp. Med. 168, 2513-2529, 1988
A;Title: Resolution of the two components of macrophage inflammatory protein 1, an
A;Reference number: JL0088; MUID:89067830; PMID:3058856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Modecule type: mRNA
A; Residues: 24-33,'XX',36-54 <SHE>
R; Residues: 24-33,'XX', 36-54 <SHE>
R; Rolpe, S.D.; Davatelis, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.;
J. Exp. Med. 167, 570-581, 1988
          10 ILLTAAALCTPAPASPYGS--DTTPCCFAYLSLALPRAHVKEYFYTSSKCSNLAVFVTR 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cross-references: EMBL:X12531; NID:953122; PIDN:CAA31047.1; PID:953123
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Reference number: A30552; MUID:89093958; PMID:2521353
                                                                                                                                                                                                              68 RNRQVCANPEKKWVQEYINYL 88
                                                                                                                                                  60 RDKEICADPRVPWVKMILNKL 80
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A; Residues: 24-33,'XX',36-42 <WOL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . Exp. Med. 170, 2189, 1989;
Reference number: A53885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Molecule type: DNA
Residues: 1-92 <GRO>
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Residues: 1-92 <DAV>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contents: erratum
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A.Residues: 1-18 'A',20-91 <SCH>
A.Residues: 1-18 'A',20-91 <SCH>
A.Cross-references: GB:37648; NID:9250207; PIDN:AAB22330.1; PID:9250208
A.Kross-references: macrophage cell line PU5-1.8
A.Note: sequence extracted from NCBI backbone (NCBIN:106768, NCBIP:106770)
B.Shin, H.S.; Drydadle, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.
Mol. Cell. Biol. 14, 2914-2925, 1994
A;Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking region
A;Reference number: 148654; MUID:94217689; PMID:7513046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-91 < LDAN>
A; Residues: 1-91 < LDAN-
Bur. J.; Simpson, N.J.; Mak, J.Y.
Eur. J. Immunol. 22, 1477-1481, 1992
A; Title: Molecular cloning and expression of the murine RANTES cytokine: structural and A; Reference number: A46539; MUID:92289805; PMID:1376260
A; Accession: A46539
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;Residues: 1-40,'E',42-91 <NEI>
:Cross-references: GB:M77747; NID:9200649; PIDN:AAA40029.1; PID:9200650
;Comment: This chemoattractant for monocytes but not neutrophils is an immediate-early
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Species: Mus musculus (house mouse)
C; Date: 18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change 22-Jun-1999
C; Accession: 148875; #46539; 126970
R; Danoff, T.M.; Lalley, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
J. Immunol. 152, 1182-1189, 1994
A; Titte: Clonding, genomic organization, and chromosomal localization of the Scya5 gene A; Reference number: 148875; MUID:94132613; PMID:7507961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cross-references: EMBL:X70675; NID:g475205; PIDN:CAA50011.1; PID:g475206; Neilson, E.G.; Krensky, A. 1dney Int. 41, 220-225, 1992 idney Int. 41, 220-225, 1992 idney Int. 41, 200-225, 1992 idney Int. 41, 200-225, 1992; Pidie idney Int. 41, 200-225, 1992; Arthur Int. 41, 200-2277990; PMID:1375672
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                                                                                                                                                                                                                                                                                                                                                                                               1 LVLLAVAL-QATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTF 59
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A;Cross-references: EMBL:U22414; NID:9790632; PIDN:AAA80608.1; PID:9790633 C;Superfamily: macrophage inflammatory protein
                                                                                                                                                                                                                                                  Gaps
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C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation
E;1-23/Domain: signal sequence #status predicted <SIG>
F;24-91/Product: monocyte chemoattractant cytokine RANTES #status prediction
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Pred. No. 1.5e-09;
                                                                                                                                             Score 142; DB 2;
Pred. No. 7.4e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                             18; Mismatches
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                                                                                                                                        32.2%;
38.2%;
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35.8%;
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Best Local Similarity 38.25
Matches 26; Conservative
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Best Local Similarity 35.89
Matches 29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 VKMILNKL 80
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81 VQEYITEL 88
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A; Residues: 1-91 <SHI>
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A; Cross-references: GDB:127451; OMIM:153335
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29.8%; Sox
Best Local Similarity 36.5%; Pre
Matches 27; Conservative 12;
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| SKQVCADPSESWVQ
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A; Introns: 26/1; 64/2
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                                                                                                                                                                                                                                                                           A; Accession: B30574
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Nalternate names: cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation gene
protein: GC-2); T-cell activation protein gamma
C;Species: Homo saplens (man)
C;Species: Homo saplens (man)
C;Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
C;Accession: JH0319; A40978; A37411; B30574; B45817; D30552
R;Balxeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pequig
A;Title: Cloning and expression of a lymphocyte activation gene (LAG-1)
A;Reference number: JH0319; MUID:91061800; PMID:2247088
A;Note: 26-Met, 30-Pro, and 39-Thr were also found
R;Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A.
J Immunol. 146, 4031-4040, 1991
A;Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and conserv
A;Reference number: 156104; MUID:91237116; PMID:2033269
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A; Status: translation not shown
A; Modecule type: DNA
A; Modecule type: DNA
A; Modecule type: DNA
A; Modecule type: DNA
A; Cross-references: GB: X53682; NID: 934217; PIDN: CAA37723.1; PID: 934218
A; Cross-references: GB: X53682; NID: 934217; FF5, 5IIIE5
B; Modolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarra, J.R.; Seuanez, H.N.; Leonard, W.J.
J. Biol. Chem. 266, 17531-17536, 1991
J. Biol. Chem. 266, 17531-17536, 1991
A; Reference encoding the Act-2 cytokine. Genomic structure, HILV-I/tax responsiven
A; Reference number: A40978; MUID: 91373378; PMID: 1894635
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A; Residues: 1-14,'S',16-69,'G',71-92 <NAP>
A; Cross-references: GB:MG9201; NID:g178021
A; Note: 15-Ala was also found
R; Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
A; Title: Identification, cloning, and characterization of an immune activation gene.
A; Reference number: A31767; MUID:89071764; PMID:2462251
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A Status: preliminary; translated from GB/EMBL/DDBJ
A Molecule type: DNA

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A;Residues: 1-92 <LIP>
A;Cross-references: GB:J04130; NID:g178017; PIDN:AAA51576.1; PID:g178018
R;Chang, H.C.; Reinherz, E.L.
Eur. J. Immunol. 19, 1045-1051, 1989
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Best Local Similarity 36.8%
Matches 25; Conservative
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A; Molecule type: mRNA
A; Residues: 1-92 <CHA>
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A; Molecule type: mRNA
A; Residues: 1-39, 'RRASS', 46-92 <BRO>
A; Cross-references: GB: M23502; NID: 9533212; PIDN: AAA36656.1; PID: 9533213
A; Cross-references: GB: M23502; NID: 9533212; Gronenborn, A.M.
Store, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
Submitted to the Brookhaven Protein Data Bank, January 1994
A; Reference number: A52206; PBB: HUWN
A; Reference number: A52206; PBB: HUWN
A; Contents: annotation; conformation and disulfide bond assignments by (1)H-NWR, resi
C; Comment: This protein is secreted by activated lymphocytes and monocytes. It is bou
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R; Van Coillie, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van Biochem. Blophys. Res. Commun. 231, 726-739, 1997
A;Title: Human monocyte chemotactic protein-2: cDNA cloning and regulated expression A; Reference number: JC5295; MUID:9724420; PMID:9070881
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C; Comment: This protein belongs to the beta-chemokine family which is one of the majo
tis and in tumor biology, and contribute to the trafficking and recultment of the res
C; Genetics:
                                                                                                                    J. Immunol. 142, 1582-1590, 1989
A;Title: Mitogenic activation of human T cells induces two closely related genes whic
A;Reference number: A30574; MUID:89140347; PMID:2521882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 7-55, '1',57-79, 'T', 81-92 <MIL>
A; Cross-references: GB:M57503; NID:9339726; PIDN:AAA36752.1; PID:9339727
A; Cross-references: GB:M57503; NID:9339726; PIDN:AAA36752.1; PID:9339727
B; Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A; Title: A family of small inducible proteins secreted by leukocytes are members of
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F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
F:34-58,35-74/Disulfide bonds: #status experimental
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C;Date: 02-May-1997 #sequènce_revision 18-Jul-1997 #text_change 20-Jun-2000
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A; Residues: 1-19, L', 21-92 <2IP>
A; Residues: 1-19, L', 21-92 <2IP>
A; Cross-rences: G: Mal25316; NID:g602454; PIDN:AAA57256.1; PID:g602455
A; Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. 143, 2907-2916, 1989
A; Title: A novel polypeptide secreted by activated human T lymphocytes.
A; Reference number: A45817; MUID:90038522; PMID:2809212
A;Cross-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
R;21pfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Slebenlist, U.
J. Immunol. 142, 1582-1590, 1989
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A; Reference number: A30552; MUID:89093958; PMID:2521353
A; Accession: D30552
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Pred. No. 1.4e-08;
2; Mismatches 34
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A;Cross-references: GB:M23503; NID:9533244; PIDN:AAA40148.1; PID:9533245
R;Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.
T. Exp. Med. 168, 2251-2259, 1998
A;Title: Resolution of the two components of macrophage inflammatory protein 1, and A;Reference number: JL0088; MUID:89067830; PMID:3058856
                                                                                                                                                                                                           macrophage inflammatory protein 1-beta precursor - mouse
N;Alternate names: H400; SIS gamma; T-cell activation protein gamma
C;Species: Mus musculus (house mouse)
C;Date: 28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999
C;Accession: C30552; JL0088; PS0304; S22042
B;Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A;Title: A family of small inducible proteins secreted by leukocytes are members of sof various activation processes.
A;Reference number: A30552; MUID:89093958; PMID:2521353
A;Accession: C30552.
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C; Species: Homo saptens (man)
C; Sate: 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 20-Jun-2000
C; Accession: B35673; B30412; S10157; B30908
R; Nakao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3658, 1990
A; Fitle: Structures of human genes coding for cytokine LD78 and their expression.
A; Reference number: A35673; MUID:90287155; PMID:1694014
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C. Superfamily: macrophage inflammatory protein
C. Superfamily: asymptotein
F:1-23/Domain: signal sequence #status predicted <SIG>F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>-F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>-F:76/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: protein
A;Residues: 24-33,'XX',36,'X',38 <SH2>
R;Daubersies, P.; Lepretre, F.; Bailleul, B.; Grove, M.; Pragnell, I.; Plumb, I
submitted to the EMBL Data Library, October 1991
A;Description: Sequence of the murine macrophage inflammatory protein 1b gene.
A;Reference number: S22042
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          Gaps
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A:Molecule type: DNA
A:Molecule type: DNA
A:Residues: 1-92 < DAU>
A:Cross-references: EMBL:X62502; NID:953126; PIDN:CAA44364.1; PID:953127
C:Comment: This protein is a monokine.
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A:Accession: PS0304
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69 RGRQICANPSEPWVTEYMSDL 89
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Matches 31; Conservative
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A; Residues: 1-92 <BRO>
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A; Residues: 1-92 <SHE>
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N'Alternate names: LD78-alpha protein precursor; lymphocyte tumor promoter-induced prote
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A; Residues: 1-92 <ZIP>
A; Residues: 1-92 <ZIP>
A; Residues: 1-92 <ZIP>
A; Cross-references: GB:MZ5315; NID:g602452; PIDN:AAA57255.1; PID:g602453
B; Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A; Title: Three human homologs of a murine gene encoding an inhibitor of stem cell prolif
A; Reference number: A30412; MUID:91103879; PMID:2271120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GB:D90144; NID:g219905; PIDN:BAA14172.1; PID:g219906
R;Z4pfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Slebenlist, U.
Immunol. 142, 1582-1590, 1989
A;Title: Mitogenic activation of human T cells induces two closely related genes which A;Reference number: A30574; MUID:89140347; PMID:2521882
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A; Residues: 1-92 <BLU>
A; Residues: 1-92 <BLU>
A; Cross-references: GB:M23178; GB:M32337; NID:g182846; PIDN:AAA35858.1; PID:g182847
B; Obaru, K.; Fukuda, M.; Maeda, S.; Shimada, K.
J. Błochem. 99, 885-894, 1986
A; Title: A cDNA clone used to study mRNA inducible in human tonsillar lymphocytes by a A; Reference number: A24198; MUID:86223879; PMID:3086300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change 21-Jul-2000
C; Accession: A35673; A30674; A30412; A24198; A30908
R; NaKao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3658, 1990
A; Title: Structures of human genes coding for cytokine LD78 and their expression. A; Reference number: A35673; MUID:90287155; PMID:1694014
A; Accession: A35673
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C;Superfamily: macrophage inflammatory protein
C;L-120/Domain: signal sequence %status predicted <SIG>
F;21-92/Product: macrophage inflammatory protein 1-alpha #status predicted <MAT>
F;31-57,34-73/Disulfide bonds: #status predicted
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A;Gene: mcp-2
C;Superfamily: macrophage inflammatory protein
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-99/Product: monocyte chemotactic protein-2 #status predicted <MAT>
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                                                                                                                                                                          ;; Score 130; DB 2; Length 99;
;; Pred. No. 2.2e-08;
15; Mismatches 36; Indels
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Pred. No. 2.7e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57 LTFRDKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Cross-references: GDB:120368; OMIM:182283
                                                                                                                                                                          ch 29.5%;
1 Similarity 33.7%;
29; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29.3%;
34.5%;
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Best Local Similarity 34.5:
Matches 20; Conservative
                                                                                                                                                                                                               Best Local Similarity
Matches 29; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-92 <NAK>
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A; Residues: 1-92 <OBA>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Accession: A30574
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                                                                                                                                                                              Query Match
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23 SVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 80

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A; Molecule type: mRNA
A; Residues: 1-109 <00Ps.
A; Cross-references: GB:X72308; GB:S57464; NID:93928270; PIDN:CAA51055.1; PID:9313708
A; Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Milou
submitted to the EMBL Data Library, March 1993
A; Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoatt
A; Reference number: S32222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: mRNA
A;Residues: 1-109 <MIN:
A;Cross-references: EMBL:X71087; NID:g288396; PIDN:CAA50405.1; PID:g288397
C;Comment: This protein induces proteinase secretion and chemotaxis by macrophages an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Wempe, F.; Henschen, A.; Scheit, K.H.
DNA Cell Biol. 10, 671-679, 1991
A;Title: Gene expression and cDNA cloning identified a major basic protein constituen A;Reference number: A39296; MUID:92096117; PMID:1721821
                                                                                                                                                                                                                                           Nilternate names: monocyte chemoattractant protein MCP-3
C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 28-Oct-1994 *text_change 16-Jul-1999
C; Accession: A54678; JG1478; S32222
R; Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, Genomics 21, 403-408, 1994
A; Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to A; Reference number: A54678; MUID:94375065; PMID:7916328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: GB:X72309
R;Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.
Biochem. Biophys. Res. Commun. 191, 535-542, 1993
A;Title: Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the CDNA A; Reference number: JC1478; MUID:93213290; PMID:8461011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 LVLLAVALQATE-AGPYGANMEDSVCCRDYVRYRLP-LRVVKHFYWTSDSCPRPGVVLLT 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      monocyte chemoattractant protein 1 precursor - bovine
NiAlternate names: monocyte chemotactic factor 1; seminal plasma protein P6
C; Species: Bos primigenius taurus (cattle)
C; Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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K;Keywords: cytchkine; glycoprotein; inflammation
F;1-33,Domain: signal sequence #status predicted <SIG>
F;34-109/Product: monocyte chemotactic protein 3 #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;39/Binding site: carbohydrate (Asn) (covalent) #status predicted
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                                                                                                                                                                                                                              monocyte chemotactic protein 3 precursor - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A,Gene: GDB:SCYA7; SCYA6; MCP-3
A,Cross-references: GDB:138473; OMIM:158106
A,Map position: 17q11-17q12
A)Introns: 36/1; 75/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KLDKEICADPTQKWVQDFMKHLDK 102
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82
                                     ::||:||||| ||: ||| || 68 KNKEVCADPIQKWVQDYIAKLDQ
60 RDKEICADPRVPWVKMILNKLSQ
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Matches 30; Conserv
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A; Residues: 1-109 <OPD>
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J. Immunol. 150, 5025-5032, 1993
Yiltle: CDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of
A;Reference number: I48147; MUID:93267104; PMID:8496603
A;Accession: I48147
                                                                                                                    R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell prolif
A;Reference number: A30412; MUID:91103879; PMID:2271120
A;Accession: B30412
                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-93 <BLU>
A; Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g182849
A; Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g182849
B; Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Sieber
Nucleic Acids Res. 18, 3261-3270, 1990
A; Title: Two inflammatory mediator cytokine genes are closely linked and variably amplif
A; Reference number: S10157; MUID:90287702; PMID:1972563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666
C;Comment: This protein is a member of a "small inducible" or "activation specific" gene
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C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
C;Accession: 148147
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                                                                                        A; Cross-references: GB: D90145; NID: 9219907; PIDN: BAA14173.1; PID: 9219908
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C.Superfamily: macrophage inflammatory protein
Krywords: cytokine
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-93/Product: LD78-beta protein #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 28.1%; Score 124; DB 2; Best Local Similarity 31.2%; Pred. No. 1.1e-07; Matches 25; Conservative 17; Mismatches 36;
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Pred. No. 3.2e-07;
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A;Molecule type: mRNA
A;Residues: 1-120 <RES>
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C;Superfamily: macrophage inflammatory protein
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A; Introns: 26/1; 64/2
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Best Local Similarity
Matches 30; Conserv
                           A; Molecule type: DNA
A; Residues: 1-93 <NAK>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-93 <IRV>
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A; Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124
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C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 20.Feb-1993 #sequence_revision 20.Feb-1993 #text_change 16-Jul-1999
C;Accession: A35474; A33476; S03339; I51841; A60299; A32300; A32396; A34561; I57488; JC1
R;Shyy, Y.J; Li, Y.S.; Kolattukudy, P.E.
Biochem. Blophys. Res. Commun. 169, 346-351, 1990
A;Title: Structure of human monocyte chemotactic protein gene and its regulation by TPA. AAccession: A35474
                                                                                                                    A.Cross-references: GB:W84602; GB:W85264; NID:g163394; PIDN:AAA30651.1; PID:g163395
A;Accession: B39296
A;
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C; Species: Bos primigenius indicus (zebu cattle)
C; Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 03-May-1996
C; Accession: JC2336
C; Accession: JC2336
C; Accession: JC2336
A; Title: Characterization of the bovine monocyte chemoattractant protein-1 gene.
A; Reference number: JC2336; MUID:94338337; PMID:80660303
A; Molecule type: protein
A; Residues: 1-99 <WEM>
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A;Gene: MCP-1
A;Introns: 26/1; 65/2
C;Superfamily: macrophage inflammatory protein
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Matches 28; Conservative
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Best Local Similarity
Matches 28; Conserv
                                     Molecule type: mRNA Residues: 1-99 <WEM>
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A; Residues: 1-99 <SHY>
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A; Molecule type: mRNA
A; Residues: 1-99 <FURS
A; Residues: 1-99 <FURS
A; Residues: 1-99 <FURS
A; Residues: 1-99 <FURS
A; Cross-references: GB:M24545; NID:g187434; PIDN:AAA18164.1; PID:g307163
B; Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanow—t Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989
A; Title: Complete anino acid sequence of a human monocyte chemoattractant, a putatile
A; Reference number: A32396; MUID:89184525; PMID:2648385
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A; Readues: 'X', 25-99 - ROB-
A; Readues: 'X', 25-99 - ROB-
B; Decock, B.; Conings R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J.
Biochem. Biophys. Res. Commun. 167, 904-909, 1990
A; Ittle: Identification of the monocyte chemotactic protein from human osteosarcomec.
A; Reference number: A34561; MUID:90211336; PMID:2322286
A; Accession: A34561
Ricollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.

Mol. Cell. Biol. 9, 4687-4695, 1989

A;Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A;Reference number: A33476; MUID:90097880; PMID:2513477

A;Accession: A33476

A;Molecule type: mRNA
A;Residues: 1-99 < ROL>
A;Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:9188701; PIDN:AAA36330.1; FR:Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
R;Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
A;Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning.
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A; Residues: 29-33, 'XX', 36-52; 82-92 < DEC>
R; Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, E.B. Mol. Cell. Blochem. 126, 61-68, 1993
A; Title: The expression of monocyte chemotactic protein (MCP-1) in human vascular ed A; Reference number: 157488; MUID:94150478; PMID:8107690
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R;Bottazzl, B; Colottuk, F; Sloa, A.; Nobill, N.; Mantovanl, A.
R;Bottazzl, B; Colottuk, F; Sloa, A.; Nobill, N.; Mantovanl, A.
R;Bottazzl, B; Colottuk, F; Sloa, A.; Nobill, N.; Mantovanl, A.
A;Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotac—1
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A; Residues: 1-99 <-BOTY-
R; Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, T.; Yamada, M.; Larsen,
Biochem. Biophys. Res. Commun. 159, 249-255, 1989
A; Title: Cloning and sequencing of the cDNA for human monocyte chemotactic and acti-
A; Reference number: A32300; MUID:89165862; PMID:2923622
A; Reference number: A32300
A; Status: not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514 A:Experimental source: g14cma cell line U-105MG RP:Yoshimura, T: Leonard, B.J. A;T: Leonard, B.J. A;T:Leonard, B.J. A;T:Leonard, B.J. A;T:Lei: Human monocyte chemoattractant protein-1 (MCP-1).
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A; Accession: 151841
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A;Accession: A60299
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A; Accession: S03339
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A:Molecule type: mRNA
A:Residues: 1-99 <YO2>
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A;Molecule type: .mRNA
A;Residues: 1-99 <YOS>
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Search completed: July 28, 2003, 04:15:49
Job time : 8.09664 secs
                                                                                                                                          A/Gene: GDB:SCYA2
A/Genes: GDB:SCYA2
A/Cross-references: GDB:125279; OMIM:158105
A/Hap position: 17q11.2-17q12
C;Superfamily: macrophage inflammatory protein
C;Superfamily: macrophage inflammatory protein
C;Keywords: cytokine; glycoprotein; inflammation; pyroglutamic acid
C;Keywords: cytokine; glycoprotein; inflammation in pyroglutamic acid
C;Keywords: cytokine; glycoprotein; inflammation in #status experimental cMAT>
F:24-99/Product: monocyte chemoattractant protein 1 #status experimental cMP
F:29-99/Product: monocyte chemoattractant protein 1, short form #status experiments cytoking site: carbohydrate (Asn) (covalent) #status predicted
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A; Cross-references: EnBL:X17053; NID:g55530; PIDN:CAA34901.1; PID:g55531
B; Yoshimura, T.; Takeya, M.; Takahashi, K.
Biochem. Biophys. Res. Commun. 174, 504-509, 1991
A;Title: Molecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its exp. A;Reference number: JN0128; MUID:91128376; PMID:1704226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Species: Rattus norvegicus (Norway rat)
C; Species: Rattus norvegicus (Norway rat)
C; Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C; Accession: S07723; JN0128
R; Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J.
Nucleic Acids Res. 18, 23-34, 1990
A; Title: Analysis of the rat JE gene promoter identifies an AP-1 binding site essential
A; Reference number: S07723; MUID:90174947; PMID:2106664
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A;Residues: 1-148 <YOS>
A;Cross-references: 08.M57441; NID:9205333; PIDN:AAA63496.1; PID:9205334
A;Expestimental source: spleen cells
A;Expestimental source: spleen cells
A;Note: the authors translated the codon GAA for residue 62 as Lys and GCT for residue
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C;Superfamily: macrophage inflammatory protein
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-148/Product: immediate-early serum-responsive protein JE #status predicted <MAT>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 LICLILIAATFIPQGLAQPDAINAPVTCCYNFINRKISVQRLASYRRITSSKCPKEAVIF 66
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N.Alternate names: monocyte chemoattractant protein-1
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30.2%; Pred. No. 4.3e-06;
tive 17; Mismatches 37;
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Pred. No. 8.4e-06;
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29.5%;
                      A; Molecule type: mRNA
A; Residues: 24-28, 'Q', 30-99 <YEQ>
C; Genetics:
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26; Conservative
A; Reference number: JC1096
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Best Local Similarity
Matches 26; Conserva
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July 28, 2003, 03:58:03 ; Search time 4.30672 Seconds (without alignments) 789.709 Million cell updates/sec
GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                              OM protein - protein search, using sw model
                                                                                                                                             Run on:
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US-09-509-165A-2\_COPY\_12\_93 441 1 LVLLAVALQATEAGPYGANM.......EICADPRVPWVKMILNKLSQ Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

112892 seqs, 41476328 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt\_40:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

			Description	1 441 100.0 93 1 SY22_HUMAN 000626 homo sapien
SUMMAKIES			ΙĐ	441 100.0 93 1 SY22_HUMAN
			DB	-
			Length	93
	æ	Query	Match	100.0
			No. Score Match Length DB ID	441
		Result	NO.	П

	Description	26 ho	mus mu	Q90826 gallus gall	h smal	P13501 homo sapien		P50231 rattus norv	Q62401 mus musculu	P30882 mus musculu	P50230 rattus norv	Q16627 homo sapien		P10855 mus musculu		kapos	уошо	homo	P97272 cavia porce	mus m	homo	homo	рошо	cavie	homo	Q92583 homo sapien	_	Q99731 homo sapien	Q9myn4 macaca fasc	bos t	P13500 homo sapien	4 ratt	71 home	070460 mus musculu
SUMMARIES	ID	SY22_HUMAN	SY22_MOUSE	SY04_CHICK	SY18_HUMAN	SY05_HUMAN	SY03_RAT	SY05_RAT	SY12_MOUSE	SY05_MOUSE	SY04_RAT	SY14_HUMAN	SY05_BOVIN	SY03_MOUSE	SY04_HUMAN	VMI2_KSHV	SY08_HUMAN	SY03_HUMAN	SY05_CAVPO	SY04_MOUSE	SY15_HUMAN	SY3L_HUMAN	SY13_HUMAN	SY02_CAVPO	SY07_HUMAN	SY17_HUMAN	REG1_BOVIN	SY19_HUMAN	SY02_MACFA	MCPA_BOVIN	SY02_HUMAN	SY02_RAT	EOTA_HUMAN	SY19_MOUSE
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d	Query Match					33.4		•		•	31.4	30.6	30.0	29.9	29.8	29.5	29.5	29.3	29.1	29.0	28.3	28.1	27.8	27.4	27.1	27.0	26.9	26.9	26.1	25.6	25.2	24.9	24.8	24.8
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	esult No.	1	7	က	4	ഗ	9	7	œ ·	on i	10	11	12	13	14	12	16	17	18	19	50	21	22	23	24	25	56	27	78	59	30	31	32	33

099/kc0 mus musculu 089093 mus musculu P49873 sus serofa P46632 oryctolagus 009141 bos taurus P5203 canis famil 099258 homo sapien P10148 mus musculu 000585 homo sapien P55773 homo sapien
SY24_MOUSE SY20_MOUSE SY30_MOUSE SY30_LRABIT SY30_LONEA SY20_LONEA SY26_HUMAN SY26_MOUSE SY21_HUMAN SY02_MOUSE SY21_HUMAN
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109.5 109 108.5 107 107 106 104 103.5 102.5
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## ALIGNMENTS

RESULT 1 SY22LHUMAN SY2ZHUMAN SYZHUMAN SYZHUM
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900826; 0910C9;

01-NOV-1997 (Rel. 35, Created)
115-JUN-2002 (Rel. 41, Last sequence update)
115-JUN-2002 (Rel. 41, Last annotation update)
115-JUN-2002 (Rel. 41, Last annotation)
115-JUN-2002 (Rel. 41, Last an
                                                                                                                                                                                                                 MEDLINE-98353531; Pubmed-9687523;
Schaniel C., Pardall E., Sallusto F., Speletas M., Ruedl C.,
Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 92;
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39859881CDAE07CA CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 70.3%; Score 310; DB 1; Local Similarity 65.4%; Pred. No. 1.4e-30; les 53; Conservative 18; Mismatches 10
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MGD; MGI:1306779; SCya22.
InterPro; IPR001827; CC_chemkine_sml.
InterPro; IPR01811; Chemckine_ILB.
Pfam; PF00048; ILB; 1.
SMART; SM00199; SCY; 1.
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76
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                                         SEQUENCE FROM N.A.
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              J. BIOL. Chem. 273:1764-1768(1998).

-I. FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY ACTIVATED I LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING I LYMPHOCYTES. BINDS TO CCR4.
                                                                                                                                                                                                                                                                                                                                             SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN MONCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH NODE, APPENDIX, ACTIVATED MONCYTES, RESTING AND ACTIVATED MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EXPRESSION IN SMALL INTESTINE. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR
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15-JUL-1999 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
(Activated B and dendritic cell-derived).
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Mus musculus (Mouse).
Mus musculus (Mouse).
Mus musculus (Mouse).
Mammalla: Metazoa; Chordata; Cranlata; Vertebrata; Buteleostomi;
Mammalla: Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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Pred. No. 2.2e-46;
0; Mismatches 0;
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BY SIMILARITY.
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InterPro; IPR001811; Chemokine_IL8.
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100.0%;
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receptor 4.";
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SMART; SM00199; SCY; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HSSP; Q98157; 1CM9.
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MIM; 602957; -
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O88430;
chemokine
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Gaps

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sapiens (Human)
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    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VLLIAICYQ-TSAAPVGSDPPTS-CCFTYISRQLPFSFVADYYETNSQCPHAGVVFITRK 67
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P55774;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine Al8 precursor (CCLI8) (Macrophage
inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
chemokine) (CC chemokine PARC) (Alternative macrophage activation-
associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
                                                                t
                                                                                                                                                                                                                                                                                                                                                                                           -i- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                           Hughes S.M., Bumstead N.; "Mapping of the gene encoding the chicken homologue of the mammalian chemokine SCIA4.";
                                                                                                                                                                                                                                                                                         Petrenko O., Enrietto P.J.;
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY.AND CHEMOKINETIC PROPERTIES
                                      Petrenko O., Ischenko I., Enrietto P.J.; "Ischenko I., Enrietto P.J.; "Ischation of a cDNA encoding a novel chicken chemokine homologous mammalian macrophage inflammatory protein-1 beta."; gene 160:305-306(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
BY SIMILARITY.
BY SIMILARITY.
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Pred. No. 6.8e-12;
8; Mismatches 30; Indels
                                                                                                                                                                                                                                 Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M -> L (IN REF. 1).
50AF9679A267408F CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                           SUBUNIT: HOMODIMER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AJ243034; CAB45103.1; -.
HSSP; P13236; 1HUM.
INTECPTO; IPROU0827; CC_chemkine_sml.
InterPro: IPRO1311; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
                     MEDLINE-95369710; PubMed-7642115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GREVCANPENDWVQDYMNKM 87
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37.5%;
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TISSUE-Bone marrow;
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Best Local 8
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SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
TISSUB-AORLA, and Lung;
MEDLINE-97376836; PubMed-9233607;
Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatuki K.,
Miura R., Opdenakker G., van Damme J., Yoshie O., Nomiyama H.;
"A novel human CC chemokine PARC that is most homologous to
macrophage-inflammatoxy protein-1 alpha/Lb78 alpha and chemotactic for
J. Immunol. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES, HAS CHEMOTACTIC ACTIVATE NAIVE T CELLS, CD4+ AND CD8+ T CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-97275308; PubMed-9129202; Wells T.N.C., Peitsch M.C.; Wells T.N.C. and characterization information source: identification and characterization of novel chemokines using the WorldWideWeb and expressed sequence tag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-99168908; PubMed-10049593;
Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
Hughes A.L., Noniyama H.;
"Chemokine PARC gene (SCYA18) generated by fusion of two
MIP-lalpha/LD78alpha-like genes.";
Genomics 55:353-357(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kodelja V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerdt S.; "Alternative macrophage activation-associated CC-chemokine-1, a novel structural homologue of macrophage inflammatory protein-1 alpha with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.; "The genomic locus for the AMAC-1 gene contains possible pseudo-exons within the first intron sequence." Waithin the first intron sequence." Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A dendritic-cell-derived C-C chemokine that preferentially attracts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Neote K., McColl S.R.;
Mednomic organization and biological characterization of the novel
human CC chemokine DC-CK-I/PARC/MIP-4/SCYA18.";
Genomics 56:296-302(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUB-Dendritic cell;
MEDLINE=97336102; PubMed=9192897;
Medman G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
Figdor C.G.;
Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A., AND CHARACTERIZATION.
MEDLINE-99189237; PubMed-10087196;
Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
                                         Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
                                                                                                                                                                                                                                protein-3 and 02-APR-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Th2-associated expression pattern.";
Immunol. 160:1411-1418(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Leukoc. Biol. 61:545-550(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=98230488; PubMed=9570561;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nature 387:713-717(1997).
                                                                                                                                                                                                       Li H., Ruben S.;
"Macrophage inflammatory
Patent number US5504003,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISCUSSION OF SEQUENCE.
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                              NCBI_TaxID=9606;
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NCBI_TaxID=9606;
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                     - 1- SUBCELLULAR LOCATION: Secreted.
- 1- SUBCELLULAR LOCATION: Secreted.
- 1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES, PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
- DERIVEDE FROM PERIPHERAL BLOOD MONOCYTES, NOT EXPRESSED BY PERIPHERAL BLOOD MONOCYTES, NOT EXPRESSED BY PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
- DIFFERENTIATION IS A PREBEQUISITE FOR EXPRESSION.
- INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND IL-10. EXPRESSION IS INHIBITED BY IFN-CAMMA WHILE GLUCOCORTICOIDS EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING MONOCYTIC U937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C.C.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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01-JAN-1990 (Rel. 13, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
protein) (SIS-delta) (T cell-specific protein P228).
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Catarrhini; Hominidae; Homo.
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MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Score 151; DB 1; Length 89;
; Pred. No. 2.1e-11; . .
17; Mismatches 33; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
BY SIMILARITY.
C287B94B9C0518E4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Inflammatory response; Signal.
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                                                                                                                                                                                                                                                                                                                                         EMBL; AB012113; BAA34368.1; ---
EMBL; AF082214; AAC32287.1; ---
EMBL; AF082214; AAC32287.1; JOINED.
EMBL; AF082213; AAC32287.1; JOINED.
EMBL; AF111198; AAD30390.1; ---
HSSP; P13236; 1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemckine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCX; 1.
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66 GRQICADPNKKWVQKYISDL 85
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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35.0%;
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P13501; 043
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MEDIINE-99228475; PubMed-10213461;
Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
"Organization of the chemokine gene cluster on human chromosome
17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and
                                                     Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C., Davis M.M., Krensky A.M.; A human T cell-specific molecule is a member of a new gene family."; J. Immunol. 141:1018-1025(1988).
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HOOVER D.M., Shaw J., Gryczynski Z., Proudfoot A.E.I., Wells T.N.C.,
Lubkowski J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."; Science 270:1811-1815(1995).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
Zeng Q.P., Yang R.Y., Fu L.C.;
"The complete sequence of human beta-chemokine RANTES mRNA.";
Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Skelton N.J., Aspiras F., Ogez J., Schall T.J.; "Proton NMR assignments and solution conformation of RANTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chung C.-W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C.; "The three-dimensional solution structure of RANTES."; Biochemistry 34:9307-9314(1995).
                                                                                                                                                                                                                                                  Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strausberg R.;
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Interferon Cytokine Res. 19:227-234(1999).
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MEDLINE-95244456; PubMed-7537088;
SEQUENCE FROM N.A. MEDLINE-88285659; Pubmed-2456327;
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MEDLINE-95352612; PubMed-7542919;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-96106406; PubMed-8525373;
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                                                       This SWISS-PROT.entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                         entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
                                                                                                Usage by and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 LVLLAVALQA-TEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTF 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha).
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Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 91;
                                                                                                                                                                                                                                                                    InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART: SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYLOKine; Chemotaxis; T-cell; Signal; Inflammatory response;
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          -CELL AND MACROPHAGE SPECIFIC.
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A -> V (IN REF. 4).
FBOBFAF9A87C620F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                              92 AA.
SUBCELLULAR LOCATION: Secreted
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MEDLINE=95298037; PubMed=7779098;
                                                                                                                                      EMBL; M21121; AAA36725.1; -.
EMBL; AF043341; AAC03541.1; -.
EMBL; AF088219; AAC63331.1; -.
EMBL; AF266753; AAF73070.1; -.
EMBL; BC008600; AAH08600.1; -.
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Mammalia; Eutheria; Rodentia;
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9990 MW;
        -!- TISSUE SPECIFICITY: T-C;
-!- INDUCTION: BY MITOGENS.
-!- SIMILARITY: BELONGS TO
                                                                                                                                                                                                                                               Genew; HGNC:10632; SCYAS.
MIM; 187011; -.
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                                      (CHEMOKINE CC).
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                                                                                                                                                                                                 1HRJ; 14-OCT-96.
1RTN; 03-JUN-95.
1RTO; 03-JUN-95.
1B3A; 23-APR-99.
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91
57
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es 28; Conserv
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P50229;
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"Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel member of rat GRO/CINCs, is a predominant chemokine produced by lipopolysaccharide-stimulated rat macrophages in culture.";

Biochem. Biophys. Res. Commun. 220:945-948(1996).

-! FONCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.

HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS, BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG INFALPHA PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBCELLULAR LOCATION: Secreted.
INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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Shi M.M., Godleski J.J., Paulauskis J.D.;
"Molecular cloining and posttranscriptional regulation of macrophage
inflammatory protein-1 alpha in alveolar macrophages.";
Biochem. Biophys. Res. Commun. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                                                                                                                                                                                                                                                            Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.; "Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in acute lung injury in rats.";
J. Immunol. 154:4793-4802(1995).
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BY SIMILARITY.
A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
14E861C647F9A2EB CRC64;
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Pred. No. 2.6e-10;
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InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN-Long Evans; TISSUE-Lung;
MEDLINE-95238980; PubMed-7722328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=Wistar;
MEDLINE=96183056; PubMed=8607872;
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38.2%;
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SMART; SM00199; SCY; 1.
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VQEYITEL 88
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NCBI_TaxID-10090;
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SEQUENCE
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01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 31, Last annotation update)
Small inducible cytokine Al2 precursor (CCL12) (Monocyte chemotactic
protein 5) (MCP-5) (MCP-1 related chemokine).
SCYA12 OR MCP5.
Mus musculus (Mouse).
                                                                                                                                                                                   Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                    01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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Interpro; IPR001811; Chemokine_ILB.
Promain; Pr00048; ILB: 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
SIGNAL 1 24 POTENTIAL.
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BY SIMILARITY
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                              STANDARD;
                                                                                                                                                 protein) (SIS-delta)
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                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                            NCBI_TaxID=10116;
                                                                  01-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29;
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Best Local
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            SY05_RAT
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METALIS G.-O., GOAZIO J.A., LIDIO C., KREMET L., LA L., MAITHER A.C., MAITHER A.C., MAITHER A.C., MAITHER A.C., MAITHER A.C., GOAZIO J.A., LIDIO C., KREMET L., LA L., MAITHER A.C., MAY A.C. A.C., GOAZIO J.A., LIDIO C., KREMET L., LA L., MAITHER A.C., MAITHER A.C., GARGACHINE, M. GATCHAR SEGNO HAND ALL MAINTENANCE COMMUNICATION CONTROL TO THE MAINTENANCE FROM N. A.

STATEL NH. N. GATCHAR SEGNED E. A., MCLEAN J.A., CHARO I.F., LUBIER A.D.; MAILINE MONOCYPE CHARMACHECATE PROPER N. A.

STATEL NH. N. GATCHAR SEGNED E. A., MCLEAN J.A., CHARO I.F., LUBIER A.D.; MAILINE MONOCYPE CHARMACHECATE PROPER N. A.

STATEL NH. N. GATCHAR SEGNED E. A., MCLEAN J.A., CHARO I.F., LUBIER A.D.; MAILINE MONOCYPE CHARMACHECATE A.C. MAILENTEL A.C. MAILINE A.C. MAILENTEL C. MAILENTEL A.C. MAILEN
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Score 140; DB 1; Length 104;

31.78;

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NCBI_TaxID=10116;
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P50230;
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                                 2;
                                                                                                 3 LLAVALQATEAGPYGANMEDSV----CCRDYVRYRLPLRVVKHF-YWTSDSCPRPGVVL 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-92277990; PubMed-1375672; Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C., Krensky A.M., Neilson E.G.; "Isolation and characterization of cDNA from renal tubular epithelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                   Gaps
                                                                                                                                                                                                                                                                                                                                             01-JUL-1993 (Rel. 26, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta) (MuRantes).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=NIH Swiss;
MEDLINE-94132613; PubMed=7507961;
Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.; '"Cloning, genomic organization, and chromosomal localization of the Scya5 gene encoding the murine chemokine RANTES.";
J. Immunol. 152:1182-1189(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOFHILS AND ACTIVATES EOSINOPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2, -
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MEDLINE=92289805; PubMed=1376260;
Schall T.J., Simpson N.J., Mak J.Y.;
"Molecular cloning and expression of the murine RANTES cytokine: structural and functional conservation between mouse and man.";
Eur. J. Immunol. 22:1477-1481(1992).
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"Definition of a lipopolysaccharide-responsive element in the flanking respions of MuRantes and crg-2.";
Mol. Cell. Biol. 14:2914-2925(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=BALB/CJ,B10.S/J, NOD/LTJ, and SJL/J; TISSUE=Spleen;
Ma R.Z., Teuscher C.;
Pred. No. 5.1e-10;
o. Wismatches 34; Indels
                                                                                                                                                                                                                                                                                                          91 AA.
                                                                                                                                                        57 LTFRDKEICADPRVPWVKMILNKLSQ 82
                                                                                                                                                                                PRT;
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MEDLINE-94217689; PubMed-7513046;
                              13;
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             38.48;
                              33; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                musculus (Mouse)
           Similarity
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P30882;
           Best Local
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                            Matches
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licenseelsb-sib.ch)
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15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory protein 1-beta) (MIP-1-beta).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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cell; Signal; Inflammatory response.
POTENTIAL.
SMALL INDUCIBLE CYTOKINE A5.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31.6%; Score 139.5; DB 1; Length 91; 35.8%; Pred. No. 5.1e-10; Live 17; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T -> A (IN REF. 2).
A -> E (IN REF. 1).
5DFD66F4684FE1C8 CRC64;
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InterPro; IPR001811; Chemokine_IL8.
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                                                                                                                                                                                                                                                                             AF065944; AAC17511.1; -. AF065945; AAC17512.1; -. AF065946; AAC17513.1; -. AF065947; AAC17514.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T-cell;
                                                                                                                                                                                                                          U02298; AAA18302.1; -. x70675; CAA50011.1; -.
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                                                                                                                                                                          EMBL; M77747; AAA40029.1; -.
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Cytokine; Chemotaxis; T-
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entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                   1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
                                                                                                                                                                                                                                                                                                  Nomlyama H., Fukuda S., Ilo M., Tanase S., Miura R., Yoshie O.; "Organization of the chemokine gene cluster on human chromosome 17q11.2 containing the genes for C chemokine MPIF-1, HCC-2, LEC, and RANTES.";
                                                                                                                                                                                                                                                                                                                                                                                                                               SY14_HUMAN STANDARD; PRT; 93 AA.
016627; 013954;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2011 inducible cytokine Al4 precursor (CCL14) (Chemokine CC-1/CC-3) (NCC-1/CC-3) (NCC-2).
HOMO sapiens (Human)
                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pardigol A., Forsmann U., Zucht H.-D., Loetscher P., Schliz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.; Schliz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.; human chemokine: gene structure, expression pattern, and biological activity."; Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.

MISSUB-BOONE MARITOW;

MEDLINE-96136773; PubMed-8551235;

Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y.,

Kubbies M., Tomeczkowski J., Kirchhoff K., Raida M., Adermann K.,

Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,

Baggiolini M., Forssmann W.-G.;

"HCC-1, a novel chemokine from human plasma.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J. Interferon Cytokine Res. 19:227-234(1999).
-1- FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHA. IT INDUCED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                           ä
                                                                                                                                                                                                                              31.4%; Score 138.5; DB 1; Length 92; 36.2%; Pred. No. 6.9e-10; ive 14; Mismatches 36; Indels
                                                                                                                                                            SMALL INDUCIBLE CYTOKINE A4.
BY SIMILARITY.
BY SIMILARITY.
608451EEEEC7103D CRC64;
                                                               InterPro: IPR000827; CC_chemkine_sml.
InterPro: IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
Cytokine; Chemotaxis; Inflammatory response; Signal.
SIGNAL
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MEDLINE-99228475; Pubmed-10213461;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-Liver;
MEDLINE-98263352; PubMed-9600961;
AEDLINE-98263352; PubMed-9600961;
                                                                                                                                                                                                                                                                                                                                     61 DKEICADPRVPWVKMILNKL 80
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                                                                                                                                                                                                     92 AA; 10234 MW;
                                        EMBL; U06434; AAA96497.1; -.
                                                                                                                                                                                                                                            Local Similarity 36.28 es 29; Conservative
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                                                    HSSP; P13236;
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-: ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;
ARE PRODUCED BY ALTERNATIVE SPLICING.
-: TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL
TISSUES: SPLEEN, LIVER, SKEEFTAL AND HEART MUSCLE, GUT, AND BONE
MARROW. PRESENT AT HIGH CONCENTRATIONS (1-80 MM) IN PLASMA.
-: SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS, AT CONCENTRATIONS OF 100-1,000 NM. AND WAS INACTIVE ON T LYMPHOCYTES, NEUTROPHIE, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE PROLIFERATION OF CD34 MYELOID PROGENITOR. CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES SCYA5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R -> QTGGKPKVVKIQLKLVG (IN ISOFORM HCC
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Eukaryota Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinee; Bos.
NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMALL INDUCIBLE CYTOKINE A14 BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DDDB899DC9148836 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYTOKine; Signal; Alternative splicing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              58 TFRDKEICADPRVPWVKMILNKLSQ 82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; 249270; CAA89264.1; -. BEMBL; 270292; CAA94307.1; -. EMBL; 270293; CAA94309.1; -. EMBL; 249269; CAA89263.1; -. EMBL; AF088219; AAC63329.1; -. EMBL; AF088219; AAC83389.1; -. HSSP; P13236; 1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93 AA; 10678 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 30.69
Best Local Similarity 28.29
Matches 24; Conservative
                                                                                                                                                                                                                                                                                             C-C) (CHEMOKINE CC).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MIM; 601392;
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097919;
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SY05_BOVIN
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Cerami A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aust G., Thamm B., Rost A.K.;
"Cloning of Bos taurus RANTES mRNA.";
Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.
-!- EUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 LVLLAVALQA-TEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SYGOLOGE STANDARD; PRT; 92 AA.
P10855; P14096 (Rel. 11, Created)
01-JUL-1989 (Rel. 14, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein l'alpha) (HP-1-alpha) (TY-5) (SIS-alpha) (Heparin-binding chemotaxis protein) (L2G25B).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.";
J. Exp. Med. 167:1939-1944(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata, Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-88258380; PubMed-3290382; Mayatelis G., Tekamp-Olson P., Wolpe S.D., Hermsen K., Luedke C., Gallegos C., Coit D., Merryweather J., Cerami A.; "Cioning and characterization of a cDNA for murine macrophage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; LrKuulli, Pfound 118.
Pfound 118; TSC1; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; T-cell; Signal, Inflammatory response.
POTENTIAL.
23 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMALL INDUCIBLE CYTOKINE A5.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660DD38E015B0735 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P13501; IRTN.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
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KKRQVCANPEKKWVREYINAL 88
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       33 57
34 73
91 AA; 10073 MW;
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                   TISSUE-Intestine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10090;
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Mus musculus (M
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DISULFID
SEQUENCE
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-:- TISSUE SPECTRICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
-:- SIMILARITY: BELOWGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C.C.) (CHEMOKINE CC.).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Genomic structure of murine macrophage inflammatory protein-1 alpha and conservation of potential regulatory sequences with a human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOKINETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grove M., Lowe S., Graham G., Pragnell I., Plumb M.; "Sequence of the murine haemopoletic stem cell inhibitor/macrophage inflammatory protein 1 alpha gene."; Nucleic Acids Res. 18:561(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. STRAIN-BALB/CJ, DBA/2J, NOD/LTJ, SJL/J, and B10.S/J; TISSUE-Spleen; STRAIN-BALB/CJ, DBA/2J, NOD/LTJ, SJL/J, and B10.S/J; TISSUE-Spleen; Ma R.Z., Teuscher C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermsen K., Luedke C., Gallegos C., Coit D., Merryweather J., Cerami A.;
J. Exp. Med. 170:2189-2189(1989).
                                                                                                                                                                                                                                            are
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MEDLINE-91237116; Pubmed-2033269;
Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
                                                                                                                                     SEQUENCE FROM N.A.
MEDLINE-89093958; PubMed-2521353;
Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
A family of small inducible proteins secreted by leukocytes
members of a new superfamily that includes leukocyte and
                                                                                                                                                                                                                                                                                                      fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes."; J. Immunol. 142:679-687(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ma R.Z., Teuscher C.;
Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-89184547; PubMed-2784565;
Kwon B.S., Weisseman S.M.;
"cDNa sequences of two inducible T-cell genes.";
Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=DBA/20;
MEDLINE=91016858; PubMed=2216738;
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EMBL, X12531; CAA31407.1; -.
EMBL, X53372; CAA37452.1; -.
EMBL, J04491; AAA40304.1; -.
EMBL, M73061; AAA39707.1; -.
EMBL, AF065940; AAC17506.1; -.
EMBL, AF065941; AAC17508.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. Immunol. 146:4031-4040(1991).
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                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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FUNCTION
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P13236; P22617; 013704;
01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 14, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory protein 1-beta) (MIP-1-beta) (T-cell activation protein 2) (ACT-2)
(PAT 74) (H40) (SIS-gamma) (Lymphocyte activation gene-1 protein)
$CMG-1, (LAG1) (G-26 T lymphocyte-secreted protein).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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MEDILINE-89093958; PubMed-2521353;
MENOWN K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
"A Amily of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE-89140347; PubMed-2521882;
Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ESOURNCE FROM N.A.
MEDLINE-89071764; PubMed-2462251;
Lipes M.A., Napolitano M., Jeang K.-T., Chang N.T., Leonard W.J.;
"Identification, cloning, and characterization of an immune
"retivation gene."; --- " < A. 85:9704-9708(1988).
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24; Indels
                                                                                                                                                                                                                                                                                                                       BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
F -> L (IN REF. 3).
V -> A (IN REF. 3).
'; 8BFF2DE7C6DEDD38 CRC64;
                                                                                                                                                                                                                                                                                                             SMALL INDUCIBLE CYTOKINE
                                                                                                                                                                                                         Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Inflammatory response; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 132; DB 1;
Pred. No. 4.2e-09;
7; Mismatches 24;
                                                                                                                                                   MGD; MGI:98260; SCya3.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J. Immunol. 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17;
                                                                                                                                                                                                                                                                                                                                                                                                         10345 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                             29.9%;
36.8%;
AF065942; AAC17509.1;
AF065943; AAC17510.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25; Conservative
                                                                         A32393; A32393.
S04533; S04533.
S11685; S11685.
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                                                       A30552; A30552
                                                                                                                                   1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                         92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9606;
                                                                                                                 PIR; S11685; S
HSSP; P13236;
                                                                                                                                                                                                                                                                     Cytokine; (SIGNAL
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SEQUENCE
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SY04_HUMAN
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derived inflammatory agents, growth factors, and indicators of various activation processes.
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-!- INDUCTION: BY MITGEENS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Napolitano M.; Informatory TARC and macrophage inflammatory "Identification of the CC chemokines TARC and macrophage inflammatory protein-1 beta as novel functional ligands for the CCR8 receptor."; Eur. J. Immunol. 28:582-588(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."; Science 270:1811-1815(1995).
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                                                                                                                                                                                                                                                                                                                                                             TISSUE-T-cell;
MEDLINE-89225421; PubMed-2568930;
Chang H.C., Reinherz E.L.;
"Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2 structure on human T lymphocytes.";
Eur. J. Immunol. 19:1045-1051(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
Birren B., Fasman K., McKernan K., Nusbaum C., Richardson P.,
Lander E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-99180363; PubMed-9521068; Bernardini G., Hedrick J., Sozzani S., Luini W., Spinetti G., Welss M., Menon S., Zlotnik A., Mantovani A., Santoni A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The gene encoding the Act-2 cytokine. Genomic structure, responsiveness of 5" upstream sequences, and chromosomal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      localization.";
J. Biol. Chem. 266:17531-17536(1991).
                                                                                                                        SEQUENCE FROM N.A. MEDLINE-91061800; Pubmed-2247088;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-96106406; Pubmed-8525373;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE-91373378; Pubmed-1894635;
                                                             Immunol. 142:679-687(1989).
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16-OCT-2001 (Rel.
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InterPro; IPR001811; Chemokine_IL8.
InterPro; IPR001811; Chemokine_IL8.
SMART; SM00199; SCY; I.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytckine; Chemotaxis; Inflammatory response; Signal; 3D-structure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 92;
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BY SIMILARITY.

T -> C (IN REF. 7).

P -> L (IN REF. 2).

ARKLPR -> REASS (IN REF. 3).

S -> I (IN REF. 8).

S -> I (IN REF. 6).

S -> G (IN REF. 6).
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                                                                                                                                                                                                                                                                                                                                                                                                                      SMALL INDUCIBLE
                                                                                                                                                                                                               ; -; NOT_ANNOTATED_CDS.
                                                                                                                                             CAA37723.1; -. CAA37722.2; ALT_SEQ. CAA34291.1; -.
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C-C) (CHEMOKINE CC)
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PDB; 1HUM; 30-APR-94
PDB; 1HUN; 30-APR-94
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Best Local Similarity
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94 AA.

PRT;

STANDARD;

RESULT 15 VMI2\_KSHV ID VMI2\_KSHV

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -i- FUNCTION: BLOCKS INFECTION BY SEVERAL DIFFERENT HUMAN
-i- FUNCTION: BLOCKS INFECTION BY SEVERAL DIFFERENT HIS OCCURS BECAUSE
IMMINODEFICIENCY VIRUS TYPE 1 (HIV-1) STRAINS. THIS OCCURS BECAUSE
VMIP-II BINDS TO A WIDE RANGE OF CHEMOKINE RECEPTORS. MAY FORM
PART OF THE RESPONSE TO HOST DEFENSES CONTRIBUTING TO VIRUS-
INDUCED NEOPLASIA AND MAY HAVE RELEVANCE TO KSHV AND HIV-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBUNIT: MONOMER.
SUBCELLULAR LOCATION: Secreted.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                    ORF K4.
Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
Viruses: dsDNA viruses, no RNA stage; Herpesviridae;
Gammaherpesvirinae; Rhadinovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
MEDLINE-97121480; PubMed-8962146;
RUSSO J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
Parsy J.P., Peruzzi D., Bedalman I.S., Chang Y., Moore P.S.;
"Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X-RAY CRYSTALLOGRAPHY (2.1 ANGSTROMS).
MEDLINE-20496762; PubMed-11041848;
Fernandez E.J., Wilken J., Thompson D.A., Peiper S.C., Lolis E.;
"Comparison of the structure of vMIP-II with eotaxin-1, RANTES, and MCP-3 suggests a unique mechanism for CCR3 activation.";
Biochemistry 39:12837-12844(2000).
                                                                                                                                                                                                                                                                     Ġ
                                      16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Viral macrophage inflammatory protein-II precursor (vMIP-II) (vMIP-
                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-97094384; Pubmed-8939871;
Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
"Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                                                                                                                                             Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Clufo I Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.; Kaposli s sarcome-associated human herpesvirus-8 encodes homologs of macrophage inflammatory protein-1 and interleukin-6."; Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-20060979; PubMed-10595530;
Liwang A.C., Wang Z. X., Sun Y., Pelper S.C., Liwang P.J.;
"The solution structure of the anti-HIV chemokine vMIP-II.";
Protein Sci. 8:2270-2280(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sun R., Lin S.-F., Miller G.;
Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
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Science 274:1739-1744(1996).
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DR PDB; 1CM9; 24-JUN-99.

DR PDB; 1MPP; 24-JUN-99.

DR PDB; 1MPP; 24-JUN-99.

DR InterPro; 1PR00081; Cc_chemkine_sml.

DR InterPro; 1PR001811; Cnemokine_Lid.

DR PARM; PR00048; Lid; 1.

DR PARM; SM00199; SCY; 1.

DR PROSITE; PS000472; SMALL_CYTOKINES_CC; 1.

KW Cytokine; Signal; 3D-structure.

FT SIGNAL 1 20 VIRAL MACROPHAGE INFLAMMATORY PROTEIN-II.

FT CHAIN 34 58 VIRAL MACROPHAGE INFLAMMATORY PROTEIN-II.

FT SIGNAL 21 20 VIRAL MACROPHAGE INFLAMMATORY PROTEIN-II.

FT CHAIN 34 58 VIRAL MACROPHAGE INFLAMMATORY PROTEIN-II.

FT CHAIN 34 58 VIRAL MACROPHAGE INFLAMMATORY PROTEIN-II.

FT CHAIN 34 58 VIRAL MACROPHAGE INFLAMMATORY PROTEIN-II.

FT DISULEID 34 58 174 Societion 130; DB 1; Length 94;

SEQUENCE 94 AA; 10486 MW; 44F749BED18DD128 CRC64;

QUERY MATCH 29:58; SCORE 130; DB 1; Length 94;

Best Local Similarity 35.48; Pred. No. 7.4e-09;

Matches 29; Conservative 16; Mismatches 35; Indels 2; Gaps 2

QY 1 LVLANALQATEAG-PYGANM-EDSVCCRDYVRYRIPERVYKHFYWTSDRCPRPGVLIFIT 67

QY 59 FRDKEICADPRVPWYKMILNKL 80

DD 68 KRGRQVCADKSKDWYKKLMOQL 89

Search completed: July 28, 2003, 04:01:11

Job time: 4.30672 secs
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July 28, 2003, 03:58:28; Search time 15.1597 Seconds (without alignments) 1114.528 Million cell updates/sec
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1 LVLLAVALQATEAGPYGANM......EICADPRVPWVKMILNKLSQ
GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

sp\_unclassified:\*

sp\_vertebrate:\*

sp\_plant:\*
sp\_rodent:\*
sp\_virus:\*

sp\_rvirus:\*
sp\_bacteriap:\*
sp\_archeap:\*

sp\_human:\*
sp\_invertebrate:\*
sp\_mammal:\*

sp\_organelle:\* sp\_phage:\*

sp\_archea:\*
sp\_bacteria:\*
sp\_fungi:\*

## SUMMARIES

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Result No.	Score	Query Match	Query Match Length DB	DB	ID	Description
1	315	71.4	81	11	Q9Qzu1	O9dzul rattus norv
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m	310	70.3	92	11	Q902U2	O9qzu2 musculu
4	158.5	35.9	95	12	098158	098158 kaposi's sa
S	156	35.4	90	13	O9PWA6	Ogpwa6 gallus gall
9	155	35.1	90	13	091009	0910c9 gallus gall
7	153	34.7	91	13	080G57	08qq57 qallus qall
89	152.5	34.6	92	11	Q912L0	
σ	148	33.6	89	13	Q918E0	0918e0 gailus gall
10	142	32.2	92	11	091265	091z65 sigmodon hi
11	136	30.8	92	9	Q8SQ40	Q8sq40 felis silve
12	131.5	29.8	91	11	Q912L1	091z11 sigmodon hi
13	131	29.7	93	9	Q8SQA6	Q8sqa6 bos taurus
14	124	28.1	93	4	096168	Q96168 homo sapien
15	123	27.9	66	9	Q95N01	Q95n01 canis famil
16	118	26.8	91	13	080656	Q8qg56 gallus gall

61 DKEICADPRVPWVKMILNKLS 81 :::|||||||: ||| ||:||:

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71117 722222222222222222222222222222222	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

## ALIGNMENTS

1.1	Q9Q2U1 PRELIMINARY; PRT; 81 AA. Q9Q2U1;	01-MAY-2000 (TrEMBLrel. 13, Created)	01-MAY-2000 (TrEMBLrel. 13, Last sequence update)	Macrophage-derived chemokine (Fragment).	Rattus norvegicus (Rat).	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.	NCBI_TaxID=10116;	SEQUENCE FROM N.A.	STRAIN-SPRAGUE-DAWLEY; TISSUE-THYMUS;	Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,	Gray P.W.;	"Macrophage derived chemokine is localized to thymic medullary	epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-	thymocytes.";	barous or (12347): AAD55764.1:	HSSP; Q98157; 1CM9.	InterPro; IPR001811; Chemokine_IL8.	Pfam; PF00048; IL8; 1.	SMART; SM0199; SCY; 1.	SEQUENCE 81 AA; 9212 MW; A0A7ED1A0045D80B CRC64;	71.48	cal Similarity 67.9%; Pred. No. 1.7e-34; 55; Conservative 16; Mismatches 10;	1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60	1 LVLLAVALQTSDAGPYGANVEDSICCQDYIRHPLPPRFVKEPYWTSKSCRKPGVVLTTK 60	
RESULT 1												•					•					Query Match	Best Loca Matches			
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Virol. 71:4187-4192(1997).
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Science 274:1739-1744(1996).
                                                            53; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
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                                 Best Local Similarity
Matches 53; Conserv
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   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paccul N. D. (*E.) and all thrate inhibition by blocking macrophage-derived chemokine results in attenuation of developing crescentic chemokine. Its in attenuation of developing crescentic glomerulonephritis."

Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AF433871; AAL30397.1; -...

EMBL; AF42001811; Chemokine_IL8.

Pfam; PF00048; IL8; 1.

SEQUENCE 92 AA: 10420 MW; CBC88124502EFCOC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
Bacon K.B., Feng L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
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                                                                                                                                                                                                01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAY-2000 (TrEMBLrel. 13, Created)
1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Macrophage-derived chemokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 311; DB 11;
Pred. No. 6.7e-34;
16; Mismatches 11;
                                                                                                                                                92 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92 AA
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EMBL: AP163476; AAD55763.1; -.
HSSP: 098157; 1CM9.
MGD: MGI:1306779; Scya22.
Interpro: IPR001811; Chemokine_IL8.
Pfam: PP00048; IL8; 1.
SMART: SM00199; SCY; 1.
                                                                                                                                                                                                                                                                                          Macrophage-derived chemokine CCL22
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72 NRDICADPRMLWVKKILHKLA 92
   NRDICADPRMLWVKKILHKLA 81
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                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus (Rat)
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Q912H5
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Q9QZU2
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Neipel F., Albrecht J.C., Fleckenstein B.;
Ncalpel F., Albrecht J.C., Fleckenstein B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its pathogenicity?";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8). Viruses; dsDNA viruses, no RNA stage; Herpesviridae; Gammaherpesvirinae; Rhadinovirus.
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                                                                           Gaps
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MEDLINE-97094384; PubMed-8939871;
MOORE P.S., Bashoff C., Weiss R.A., Chang Y.;
"Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE-97121480; Pubmed-8962146; MEDLINE-97121480; Pubmed-8962146; Meddalena Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
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Length 92;
                                                                       Indels
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Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases.
EMBL: U78698; ABC570995.1; .
EMBL: U78698; AB61704.1; .
EMBL; U93872; AAB62671.1; .
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Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              098158; 012569;
1-FPB-1997 (TrEMBLrel. 02, Created)
01.-UUL-1997 (TrEMBLrel. 04, Last sequence update)
01.-UUL-2001 (TrEMBLrel. 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
70.3%; Score 310; DB 11;
65.4%; Pred. No. 9.1e-34;
Live 18; Mismatches 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95 AA.
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                                                                                                                                                                                                                                                                                                                                    61 DKEICADPRVPWVKMILNKLS 81
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us-09-509-165a-2\_copy\_12\_93.rspt

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Gallus gallus (Chicken).
                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9031;
                                              NCBI_TaxID=9031;
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Q91ZLO;
01-DEC-2001 (
01-DEC-2001 (
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                                                                                                                                            2 VLLAV-ALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR 60
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                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                        Hughes S.M., Bunstead N.;
"Mapping of the gene encoding the chicken homologue of the mammalian chemotine SCYA4.";
Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AF146730; AAD48772.1;
HSSP; P13236; 1HUM.
InterPro; IPR000B37; CC_chemkine_sml.
                                                                                                                         ij
                                                                                                   95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     35.4%; Score 156; DB 13; Length 90; 37.5%; Pred. No. 4e-13; tive 19; Mismatches 29; Indels
                                                                                                   Length
                                                                                        Score 158.5; DB 12; Lungered, No. 2e-13; Indels
                             InterPro; IPR00181; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
Hypothetical protein.
SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SEQUENCE 90 AA; 9986 MW; 50AF9679A26751CB CRC64;
                                                                                                                                                                                                                                                                                        Created)
Last sequence update)
Last annotation update)
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Last annotation update)
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                                                                                                                                                                                                                                                                     90 AA.
                                                                                                                       20; Mismatches
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01-DEC-2001 (TrEMBLrel. 19, Last sequen
01-MAR-2002 (TrEMBLrel. 20, Last annota
Macrophage inflammatory protein 1-beta.
SCYA4.
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EMBL; U71366; AAC34943.1; -. EMBL; U50138; AAD11536.1; -. HSSP; Q98157; 1VMP.
                                                                                                  35.9%;
38.8%;
                                                                                                                                                                                                                                                                                        01-MAY-2000 (TrEMBLrel, 13, 01-MAY-2000 (TrEMBLrel, 13, 01-MAR-2002 (TrEMBLrel, 20,
                                                                                                                       31; Conservative
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                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                               Gallus gallus (Chicken).
                                                                                                             Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9031;
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Q910C9;
01-DEC-2001 (
01-DEC-2001 (
01-MAR-2002 (
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                                                                                                  Query Match
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Q9PWA6
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                               Hughes S.M., Bumstead N.;
"Mapping of the gene encoding the chicken homologue of the mammalian chemokine SCYA4";
submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL. AJZ49034, CAB451031.1.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
PROSTIE: PS00475; SMALL_CYTOKINES_CC; UNKNOWN 1.
SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDINE-2165115; Pubmed=11797102; MEDINE-2165115; Pubmed=11797102; MEDINE-2165115; Pubmed=11797102; Midentification, mapping, and phylogenetic analysis of three novel chicken CC chemokines."; Inmunogenetics 53:674-683(2001).
EMBL; AY037859; AAK84432.1; ... SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
35.1%; Score 155; DB 13; Length 90;
Best Local Similarity 37.5%; Pred. No. 5.5e-13;
Matches 30; Conservative 18; Mismatches 30; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 13; Length 91;
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUN-2002 (TIEMBLrel. 21, Created) 01-JUN-2002 (TIEMBLrel. 21, Last seq 01-JUN-2002 (TIEMBLrel. 21, Last ann Chemokine ah294.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 DKEICADPRVPWVKMILNKL 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68 GREVCANPENDWVQDYMNKM 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 DKEICADPRVPWVKMILNKL 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
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68 REVCANPSDPWVQRYLQSVKR 88
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Best Local Similarity 36.vv.
Pest Local 27; Conservative
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tes 28; Conserva
                                                                                                                                                                           NCBI_TaxID=42415;
                                                                                     01-DEC-2001
01-MAR-2002
                                                                                                                       MIP1 ALPHA.
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                                                                                                                                                                   Sigmodon
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                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                Sigmodon hispidus (Hispid cotton rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
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                                                                                                                                                                                                                       DB 11; Length 92;
                                                                                                          Blanco J.C., Pletteva L.M., Prince G.A.;
"Sigmodon hispidus cytckines, chemckines and interferons.",
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, 4421392; AAL16933.1; -InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemckine_IL8.
Pfam., PF00048; IL8; IL.
PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN 1.
SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 89;
                                                                                                                                                                                                                      34.6%; Score 152.5; DB 11; Length 41.2%; Pred. No. 1.2e-12; ive 10; Mismatches 36; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHEMOKINE K203.
6FA2EA7A4950CA75 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                        Last sequence update)
Last annotation update)
 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Weining K.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 148; DB 13; Pred. No. 4.7e-12; Mismatches 32;
                                                                                                                                                                                                                                                                                                                                                                                         89 AA
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           Macrophage inflammatory protein 1 beta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-20170941; Pubmed=10704244; Sick C., Schneider K., Staehell P., We "Novel chicken CXC and CC chemokines." Cytokine 12:181-186(2000). EMBL; Y18692; CAB70956.1; -. HSSP; P13236; 1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                              Created)
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Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
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Best Local Similarity 28.4%;
Matches 23; Conservative 24
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89 AA; 9896 MW;
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                                                                                                                                                                                                                                   Sest Local Similarity 41.23
(atches 33; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               Chemokine K203 precursor.
                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                  SEQUENCE FROM N.A.
                                                                            NCBI_TaxID-42415;
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01-DEC-2001
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                                                                    Sigmodon
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 VLLAVALQATE--AGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTF 59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 VLLCIITLCNQVFSAPYGAD-TPTFCCFSYGR-QIPRKFIADYFQTSSLCSEPGIIFLTK
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                                                                                                                                                                                 Sigmodon hispidus (Hispid cotton rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Felis silvestris catus (Cat). Craniata; Vertebrata; Euteleostomi; Bukaryota; Metheria; Carnivora; Fissipedia; Felidae; Felis. NCBI_TaxID=9685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
Blanco J.C., Pletneva L.M., Prince G.A.;
Blanco J.C., Pletneva L.M., Prince G.A.;
Supmitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AVG59407, AAL26704 11.
InterPro; IPR0018377; C.C. Chemkine_sml.
InterPro; IPR0018371; C.C. Chemkine_LE8.
Prostrip: PS00448; ILB; 1.
PROSTIE; PS00442; SMALL_CYTOKINES_CC; UNKNOWN.1.
SEQUENCE 92 AA; 10334 MW; CF9AAB3D94DCAF79 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30.8%; Score 136; DB 6; Length 92; 36.0%; Pred. No. 2e-10; Live 17; Mismatches 27; Indels
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Kimura T., Kano R., Hasegawa A.;
"molecular clonding of feline RANTES gene.";
Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AB083479; BAB88940.1; -.
SEQUENCE 92 AA; 10167 MW; 256F087140BA3CE8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
RANTES protein.
                                                                              19, Last sequence update)
20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32.2%; Score 142; DB 11; 34.6%; Pred. No. 3.1e-11; ive 19; Mismatches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A
92 AA
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                                                                                                                                 Macrophage inflammatory protein-1 alpha.
                                                     01-DEC-2001 (TrEMBLrel. 19, Created)
PRT;
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Madda S., Mizuno T., Yamashita K., Kurata K., Masuda K., Ohno K.,
Tsujimoto H.;
"Molecular Cloning of Canine Thymus and Activation-Regulated Chemokine
(TARC) Gene and its Expression in Various Tissues.";
J. Vet. Med. Sci. 0.0-0(2001).
EMBL, AB054642, BAB62131.1:
InterPro; IPR000827; CC_chemkine_sml.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFR
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                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                    01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
similar to small inducible cytokine A3 (homologous to mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Score 124; DB 4; Length 93;
; Pred. No. 8.1e-09;
17; Mismatches 36; Indels
                                                                                                                                                                                                                                                                                                                                                                                 Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases. EMBL; BC007783; AAH07783.1; -. InterPro; IPR000827; CC_chemkine_sml. InterPro; IPR001811; Chemokine_LiB. Pfam; PF00048; ILB; 1. PROSTITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1. SEQUENCE 93 AA; 10144 MW; A7A78E374006D61E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
99 AA; 11052 MW; 6BA28EDDF857BE81 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Canis faniliaris (Dog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
Last sequence update)
Last annotation update)
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                                            93 AA.
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                                            PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28.1%;
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Query Match

Best Local Similarity 31.2",

Best Local 25; Conservative 1
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                                            PRELIMINARY;
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PROSITE; PS00472; SMA
                                                                                                                                                                                                       Homo sapiens (Human)
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Best Local Similarity
'-hac 27; Conserve
                                                                                                                                                                                                                                                                                              [1]
SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                   Strausberg R.
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01-DEC-2001
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                                                                                                                                                                                  Mip-1a).
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RESULT 14
Q96168
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                                                                                                                                                                                                Sigmodon hispidus (Hispid cotton rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5;
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                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
Blanco J.C., Pletneva L.M., Prince G.A.;
Blanco J.C., Pletneva L.M., Prince G.A.;
Sigmodon hispidus cytokines, chemokines and interferons.";
Submitted (SEP-2001) to be EMBL/GenBank/DDBJ databases.
EMBL, AF421391; AAL16932.1; -
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR01811; Chemokine_IL8.
Pfam; PF000489; IL18; 1.
PROSITE; PS004472; SYALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 91 AA; 10082 MW; DODGEAEABE4242FF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29.8%; Score 131.5; DB 11; Lenyum
36.6%; Pred. No. 7.8e-10;
... wismatches 28; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Werling D.;
"Role of chemokines in RSV infection.";
"Role of chemokines in RSV infection.";
"Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AY077840; AAL78060.1;
SEQUENCE 93 AA; 10118 MW; 1266BFBFCEE5E8E9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29.7%; Score 131; DB 6; Length 93 32.1%; Pred. No. 9.3e-10; Live 21; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2002 (TrEMBLrel. 21, Last sequence update) 01-JUN-2002 (TrEMBLrel. 21, Last annotation update) Macrophage inflammatory protein-1 alpha.

Bos taurus (Bovine).
                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93 AA.
                                                                    91 AA.
                                                                                                         01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last seq
01-MAR-2002 (TrEMBLrel. 20, Last ann
RANTES Chemokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q8SQA6;
01-JUN-2002 (TrEMBLrel. 21, Created)
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69 KGRQVCANPTEDWVQEYITDL 89
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Best Local Similarity 32.1
Matches 26; Conservative
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0912L1;
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Matches
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Length 99; Indels

Euteleostomi; Canis.

61

Search completed: July 28, 2003, 04:02:51 Job time: 15.1597 secs

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(without alignments) 609.878 Million cell updates/sec
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1 MARLQTALLVVLVLLAVALQ......xICADPRVPXXKMILNKLSQ
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

	th DB ID Description	93 18 AAW20059 Human macrophage d	2	11	2			4	4	1	
Query	Match Leng	97.4	97.4	97.4	97.2	97.2	97.2	97.2	97.2	97.2	
	Score	446	446	446	445	445	445	445	445	445	
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	0	Ouery Score Match Length DB ID	Ouery Score Match Length DB ID 446 97.4 93 18 AAW20059 F	Ouery Score Match Length DB ID 446 97.4 93 18 AAW20059 F 446 97.4 93 20 AAX24417	Ouery Score Match Length DB ID  446 97.4 93 18 AAW20059  446 97.4 93 20 AAY24417  446 97.4 93 20 AAY28477  F	Ouery Score Match Length DB ID 446 97.4 93 18 AAW20059 446 97.4 93 20 AAY24417 446 97.4 93 18 AAW20658 445 97.2 93 18 AAW20658 M	Ouery Score Match Length DB ID  446 97.4 93 20 AAY24417  446 97.4 93 20 AAY2872  445 97.2 93 18 AAW62058  445 97.2 93 19 AAW62058  P AAY 97.2 93 19 AAW62783	Ouery Score Match Length DB ID  446 97.4 93 18 AAW20059 F 446 97.4 93 20 AAY24417 F 446 97.2 93 18 AAW20058 M 445 97.2 93 18 AAW20058 M 445 97.2 93 19 AAW50783 F 445 97.2 93 19 AAW5433 F 6	Score Match Length DB ID  446 97.4 93 18 AAW20059  446 97.4 93 20 AAY24417  446 97.2 93 19 AAW50788  445 97.2 93 19 AAW50783  445 97.2 93 19 AAW504313  445 97.2 93 19 AAW40811	Score Match Length DB ID  446 97.4 93 18 AAW20059  446 97.4 93 20 AAY20417  445 97.2 93 18 AAW20058  445 97.2 93 19 AAW62783  445 97.2 93 19 AAW62783	Ouery Score Match Length DB ID  446 97.4 93 18 AAW20059  446 97.4 93 20 AAY2417  446 97.2 93 18 AAW20058  445 97.2 93 19 AAW62058  445 97.2 93 19 AAW62933  445 97.2 93 19 AAW40811  445 97.2 93 20 AAX40811  445 97.2 93 20 AAX40811

Macrophage derived A human macrophage-d Cytokine beta-i3 s Human chemokine be Amino acid sequenc Human macrophage-d Macaque macrophage-d Human macrophage Human macrophage d Macrophage derived Human macrophage d Human macrophage-d	Human MDC and huma Human MDC and huma Human MDC and huva Human MBC and HIV-stem cell mobilisi Human macrophage d Macrophage derived Human macrophage-d Chimeric Chemokine Mouse chemokine pr Mouse acrophage-der Murine MDC mature Mouse chemokine m Murine chemokine m Peptide #6559 enco Human brain expres		; Crohn's di	Leu, Ile, Pro, Ser, Asp, Glu, Asn, Gln, Leu, Ile, Pro, Ser, Asp, Glu, Asn, Gln, His, Asp, Glu, Asn, His, Asp, Glu, Asn,
AAYO6829 AABO7500 AAO14046 AAW5781 AAW5781 AAYO5879 AAYO5890 AAYO5874 AAYO5874 AAC0602 AAYO5874 AAC1155 AAYO1155 AAYO6873 AAYO6873 AAYO6873 AAYO6873		ALIGNMENTS .n; 93 AA  ) chemokine analogue.	okine, C-C, Cysaxis; fibroblas inflammation.	Gly, Ala, Val, Met, Tyr, Trp, Gly, Ala, Val, Phe, Tyr, Trp, Met, Ser, Lys, Arg, Cys, Lys, Arg, Lys, Arg, Cys, Cys
997.2 997.2 997.2 997.2 997.2 996.1 998.1		d; Protei rst entry derived	deriv ritis; anglog Locat 18	
111 122 123 134 144 144 155 164 174 174 174 175 175 175 175 175 175 175 175 175 175	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SULT 1 420059 AAW20059 AAW20059; 11-SEP-19 Human mac	XX MDC; macrophage KW rheumatoid arth KW wound healing; XX Synthetic. FF Key Misc-difference	FT FT Misc-difference FT FT Misc-difference FT FT Misc-difference FT

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WPI; 1999-443621/37.
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16-NOV-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Cys-cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and anglogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /label Arg, Gly, Ala, Val, Leu, Ile, Pro, Ser, Thr,
                                                                                                                                                                                                                                                                                                                                                                                            the
treat
                       Ser, Lys, Arg, His, Asp, Glu, Asn,
Cys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A new macrophage derived chemokine, MDC, a member of the C-C
                                                                                                                                                                                                                                                                                                                                                                                     Macrophage derived chemokine (MDC) and analogues - used in treatment of inflammatory diseases, MDC antibodies used to Crohn's disease, rheumatoid arthritis, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97.4%; Score 446; DB 18; Length 9 100.0%; Pred. No. 2.7e-51; rive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Macrophage derived chemokine analogue general formula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 9; Page 82; 106pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY24417 standard; peptide; 93
  84
/label- Val,
                                                                                                                                                                 96WO-US10114
                                                                                                                                                                                                       95US-0558658
95US-0479620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                         Gray PW;
                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-052324/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                   (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93 AA;
Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                WO9640923-A1
                                                                                                                                                               07-JUN-1996;
                                                                                                                                                                                                     16-NOV-1995;
                                                                                                                                                                                                                            07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-SEP-1999
                                                                                                                         19-DEC-1996
                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                           Godiska
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
  FFT SAN X A SAN A 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glu, Asn, Gln, Cys
                                                                                                                                                                                               Gln, Cys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence represents a macrophage derived chemokine (MDC) analogue. MDC analogues are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, arthritis and pulmonary fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MDC analogue; macrophage derived chemokine; C-C chemokine; human; antagonist; chemotatractant; antiproliferative; dermatological; immunosuppressive; antinflammatory; antiasthmatic; antiagregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
                                                                 Cys,
                                                                                                                                                                                             Glu, Asn,
                                                                                                                                                                                                                                          Asn,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                                                            Gln,
                                                                                                                                                                                                                                      Glu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                       Asp,
                                                                                                                                                                                             Ser, His, Trp, Asp,
                                                                                                                                                                                                                                          Asp,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human macrophage-derived C-C chemokine MDC analogue.
                                                                                                                                                                                                                                      His,
Glu,
                                                                                                          H1s,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97.4%; Score 446; DB 20;
100.0%; Pred. No. 2.7e-51;
11ve 0; Mismatches 0;
                                                                                                                                                     H19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRPGVVLLTFRDKXICADPRVPXXKMILNKLSO 93
                                                                                                          Tyr,
                                                                                                                                                                                                                                        Ser,
                                                                                                                                                     Lys,
    Asp,
                                          Val,
                                                                   Asp,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 11; Column 25-27; 43pp; English.
                                                            Trp,
                                                                                                                                                                                                                                      Val,
                                                                                                                                                     Ala,
  Trp,
                                          Gly, Ala,
                                                                                                            Lys,
                                                                                                          Ser,
                                                                                                                                                Gly,
                                                                                                                                                                                             /label- Arg, Lys,
                                                                                                                                                                                                                                          Lys,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY05872 standard; Protein; 93
                  Misc-difference 51 /label Lys,
                                                                                                                                                     Arg,
                                                                                                                                                                                                                                      /label= Arg,
                                                                                                       /label- Arg,
                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-0479620.
95US-0558658.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                     /label=
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93

61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ

m

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Met
                                                                            74
/label= Glu, I
                                                                                                   /label= Val,
                                                                                                                               98WO-US20270.
                                                                                                                                      98US-0067447
97US-0939107
                                                                 54
/label= :
                                                 51
/label=
                                      /label=
                                                                                        /label=
                              'note=
                                                                                                                                                                 WPI; 1999-254715/21
                                                                                    Misc-difference 83
                                                                                                84
                                                                                                                                                  (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                  93 AA;
                                                                                               Misc-difference
                                  Misc-difference
                                                                 Misc-difference
                                                                           Misc-difference
                                                 Misc-difference
   sapiens.
                                                                                                               WO9915666-A2
                                                                                                                              28-SEP-1998;
                                                                                                                                                          Chantry DH,
                                                                                                                                      28-APR-1998;
                                                                                                                                          26-SEP-1997;
                                                                                                                       01-APR-1999
       Synthetic
                                                                                                                                                                                                                                                  Sequence
                  Peptide
                          Protein
    Ношо
               Key
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The present sequence represents synthetic analogues of the novel human macrophage derived C-C chemokine MDC that contain amino acid alterations compared with native MDC (see AAY05871). Such MDC polypeptide analogues are specifically contemplated to modulate the binding characteristics of MDC to chemokine receptors and/or cother molecules that are considered to be important in presenting MDC to its receptor. The MDC antagonists are used in claimed mot to its receptor. The MDC antagonists are used in claimed competed for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting C MDC-induced activation, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vertebrate Macrophage Derived Chemokines, analogues and antagonists
                                                                                                                                                  Ser,
Gln,
                                                                                                                                                                                                                                                                                                                                                  Asn,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lys, Arg, His, Asp, Glu, Asn,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ser, Lys, Arg, His, Asp, Glu, Asn
                                                                                                                                                  Pro,
Asn,
                                                                                                                                                                                                                                                                                                                                                  His, Asp, Glu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Raport CJ;
                                                                                                                                                  Ile,
Glu,
                                                                                                                                                                                                                                              Ile,
Glu,
                                                                                                                                                  Leu,
Asp,
                                                                                                                                                                                                                                                                                                                                                                                                                       His, Gly,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gray PW,
                                                                                                                                                  Val,
                                                                                                                                                                                                                                              Val,
                                                                                                                                                                                                                                                                                                                                                  Lys, Arg,
                                         'note- "signal peptide"
                                                                                            "mature protein"
                                                                                                                                                  Ala,
                                                                                                                                                                                                                                                 Ala,
                                                                                                                                                                                                                                                                                                                                                                                                                       Arg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Deeley MC, Godiska R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 11; Page 59; 147pp; English.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ser,
Cys
                                                                                                                                                                                                                                                                                                                                                                                                                       Lys,
                                                                                                                                               Gly,
Phe,
                                                                                                                                                                                                                                              Gly,
Phe,
                                                                                                                                                                                                                                                                                                                                                  Ser,
                                                                                                                                                                                                Met
                                                                                                                                                                                                                                                                                                                                                                         Cys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cys
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes analogue for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                            MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation; wound healing; anglogenesis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat Crohn's disease, rheumatoid arthritis, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6; Indels
                                                                                                                                                                                 Macrophage derived chemokine for treating inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 445; DB 18;
Pred. No. 3.7e-51;
0; Mismatches 6;
PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                       1..24
/label- sig_peptide
                                                                                                                                                                                                                                                                                                                                                     25..93
/label- mat_protein
                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                    AAW20058 standard; Protein; 93 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 73; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
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Best Local Similarity 93.5%;
Matches 87; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                              96WO-US10114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-0558658.
95US-0479620.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gray PW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-052324/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAT76529
                                                                                                                                                  11-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                  WO9640923-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-NOV-1995;
07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                19-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sodiska R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                     Protein
                                                                                                                                                                                                                                                                                                                     Peptide
                                                                       AAW20058
                                                         RESULT 4
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Gaps

Length 93;

DB 20; 2.7e-51; hes 0;

97.4%; Score 446; DE 100.0%; Pred. No. 2.7 Live 0; Mismatches

Conservative

Best Local Similarity Matches 93; Conserv

ò

Query Match

1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60 

g

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This sequence represents a novel human chemokine protein, 331D5. Nucleic acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be used in diagnostics. The chemokines themselves are useful for treatment of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by the inventive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chemokine; human; detection; forensic; diagnostic; treatment; cancer; degenerative condition; abnormal proliferation; regeneration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalian CC and CXC chemokines – useful for treatment of, e.g. cancer and degenerative conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 445; DB 19;
Pred. No. 3.7e-51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                /note- "chemokine protein"
                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
 AAW59433 standard; Protein; 93 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 78; 82pp; English.
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                                                                                                                                                                                                                                                                             1..24
/label- signal
                                                                                                                                                                                                                                                                                                           25..93
/label- 331D5
                                                                                                            Human chemokine protein 331D5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Macrophage-derived chemokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              97WO-US15315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 96US-0025724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gorman DM, Hedrick JA,
                                                                                                                                                                                    degeneration; atrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SCHE ) SCHERING CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Local 87; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-207387/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; AAV34997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   compositions.
                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                     WO9811226-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-SEP-1996;
                                                                        27-AUG-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                     Peptide
                                                                                                                                                                                                                                                                                                             Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW4081
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents human STCP-1. STCP-1 polypeptides demonstrate chemokine activity for T-cells. The polypeptides are useful prophylactically or therapeutically to treat HTV infection and other conditions associated with viral/bacterial pathogens infecting T-cells, macrophages or other immune system cells. They can be included (optionally chemically modified) with a pharmaceutically acceptable carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.) in therapeutic compositions for treating these conditions. STCP-1 also useful to assay for inhibitory compounds used to reduce circulatory system STCP-1 levels to alleviate e.g. joint inflammation associated with rheumatoid arthritis, lupus or other autoimmune diseases. The pulpeptides are also useful to prepare antibodies or hybridomas. The nucleic acids are useful to prepare antibodies or hybridomas. The stCP-1 DNA/RNA in mammalian samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
                                                                                                                                                                                                                                                    Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
inhibitory compound; assay; reduce; circulatory system STCP-1 level;
joint inflammation; rheumatoid arthritis; lupus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human STCP-1 polypeptides with chemokine activity - useful e.g. to treat HIV infection or other viral or bacterial pathogens infecting T-cells, macrophages or other immune system cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ó
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 445; DB 19;
Pred. No. 3.7e-51;
); Mismatches 6;
PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ
                                                                                                                                                                                                                    Amino acid sequence of human STCP-1.
                                                                                                            Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Fig 2A-F; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                        AAW62783 standard; Protein; 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                         97WO-US21552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-0760127
                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chang M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-333326/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AMGE-) AMGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAV38933
                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                         26-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-DEC-1996;
                                                                                                                                                                                24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                 WO9824907-A1
                                                                                                                                                                                                                                                                                                                                                                                                     11-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Andrew DP,
                                                                                                                                            AAW62783;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seguence
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NA PARAMENTAL PROPERTY OF THE PROPERTY OF THE

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RESULT 6 AAW59433

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Location/Qualifiers

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W09929728-A1
                                                                                                             11-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-SEP-1999
                                                                         17-JUN-1999
                                                                                                                                                  Devico AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY24414;
                                                                                                                                                                                                                                                                                                                                                            Sequence
         Peptide
                            Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY24414
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                                                                                                                                                                                                                                                                                                         This sequence represents the macrophage-derived chemokine (MDC). This protein is used to produce the antibodies of the invention. The antibodies are useful for purifying MDC polypeptides, for detecting endogenous MDC in a host, and for modulating binding of MDC to its receptors. The DNA encoding this sequence can be used for identifying and isolating non-human MDC homologues. The MDC protein is potentially useful for treating inflammatory disorders, cancer, etc. Antagonists of MDC can be used for treating crohn's disease, arthritis, atherosclerosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
        Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy; arthritis; inflammatory disorder; cancer; Crohn's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Macrophage-derived chemokine; MDC; vaccine; immune response; antigen; humoral response; cell-mediated response; PCR; immunostimulatory; expression plasmid vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                              .....busines specific for macrophage-derived chemokine - useful for purifying or detecting the chemokine or modulating its activity
                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                Score 445; DB 19; Length 9 Pred. No. 3.7e-51; 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "leader peptide"
                                                                                                    "mature protein"
                                                                                                                                                                                                                                                                                          Claim 3; Column 21-24; 22pp; English.
                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY26175 standard; Protein; 93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                97.2%;
93.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Macrophage-derived chemokine.
                                                                                                                                                          95US-0480449
                                                                                                                                                                             95US-0480449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                   87; Conservative
                                                                                            25..93
/note=
                                                                                                                                                                                                                                   WPI; 1998-008038/01.
                                                                                                                                                                                                                 Godiska R, .Gray PW;
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                               (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                              N-PSDB; AAT99233.
                                                                                                                                                                                                                                                                                                                                                                                               93 AA;
                          atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                              Homo sapiens
                                                                                                                                                          07-JUN-1995;
                                                                                                                                                                             07-JUN-1995;
                                                                                                                     US5688927-A
                                                                                                                                        18-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY26175;
                                                                       Pept1de
                                                                                           Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
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The present sequence is macrophage-derived chemokine. This belongs to the CC class of chemokines. The efficacy of a vaccine is enhanced by combining it with one or more chemokines to enhance the immune response to an antigen. This can be humoral or cell-mediated immune response. The purified chemokines, fragments, derivatives or analogues are administered either concurrently with one or more purified antigens against which an immune response is desired or within a time period either before or after antigen administration. The chemokine gene is isolated by PCR, and administered by constructing an expression plasmid vector which can be expressed in a coordinated manner upon introduction in a suitable cell. The vaccines are immunostimulatory and can be used to treat microbial diseases especially HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                    25. 93
/note= "mature macrophage-derived chemokine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97.2%; Score 445; DB 20; Length 93; 93.5%; Pred. No. 3.7e-51; live 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 6; Fig 1A(1)-1A(2); 134pp; English.
                                                                                                                                                                                                                                                                                                                                                                                        UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST
/note= "signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methods of enhancing vaccine efficacy
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Garzino-Demo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human macrophage derived chemokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ā
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/label= signal
25..93
                                                                                                                                                                                                                                                                98WO-US26291.
                                                                                                                                                                                                                                                                                                                            97US-0069281.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 97.2's Best Local Similarity 93.5's Matches 87; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gallo RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-385578/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; AAX80630
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Raport CJ;

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The present sequence represents a novel human C-C chemokine, designated macrophage derived chemokine (MDC) that binds to the casignated macrophage derived chemokine receptor. The invention provides vertebrate MDC polypeptides (see also AAVC0886, AAVC0887) and AAVC0880) and isolated polypuclectides encoding them, vectors and host cells, and methods of for the recombinant or synthetic production of MDC. Also provided are MDC analogues, antibodies and antagonists. The MDC antagonists are used for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or pallation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of calls that express CCR4; for inhibiting or pallating an allergic reaction in a mammal, and for treating asthma (all claimed). MDC polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Macrophage derived chemokine; MDC; lentivirus infection; human; HIV; human immunodeficiency virus; feline immunodeficiency virus;
                                                                                                                                                                                                                             Vertebrate Macrophage Derived Chemokines, analogues and antagonists
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "N-terminal fragment specifically claimed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "N-terminal fragment specifically claimed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97.2%; Score 445; DB 20; Length 93; 93.5%; Pred. No. 3.7e-51; ive 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Macrophage derived chemokine (MDC) encoding DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gray PW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for in claim 18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                          Example 1; Page 124; 147pp; English.
                                                                                                                                                        Godiska R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY06829 standard; Protein; 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human immunodeficiency virus;
bovine immunodeficiency virus.
                                                                               98US-0067447.
                                                    98WO-US20270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 93.55
Matches 87; Conservative
                                                                                                                                                         Deeley MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note=
                                                                                                                                                                                      WPI; 1999-254715/21.
                                                                                                                             (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93 AA;
                                                                                                                                                                                                     N-PSDB; AAX58316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
W09915666-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-JUN-1999
                                                                                    28-APR-1998;
                                                                                              26-SEP-1997;
                                                      28-SEP-1998;
                                                                                                                                                           Chantry DH,
                         01-APR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY06829;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY06829
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                                                                                                                                                                                                                                                                                                                                              The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, arthritis and pulmonary fibrosis. The present sequence represents human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MDC; macrophage derived chemokine; C-C chemokine; human; antigoraliserstive; chemotractant; antigoraliserstive; dermatological; immunosuppressive; antialiammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                            Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 445; DB 20;
Pred. No. 3.7e-51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human macrophage-derived C-C chemokine MDC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "signal peptide"
25..93
/note= "mature nrotoir"
                                                                                                                                                                                                                                                                                                                       Claim 2; Column 41-43; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY05871 standard; Protein; 93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 97.2%;
Best Local Similarity 93.5%;
Matches 87; Conservative
                                                                                                                  96US-0660542.
                                                                                     96US-0660542
                                                                                                                              95US-0479620
95US-0558658
 /label= MDC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-AUG-1999 (first entry)
                                                                                                                                                                                                                                 WPI; 1999-443621/37.
N-PSDB; AAX90162.
                                                                                                                                                                                                        Gray PW;
                                                                                                                                                                           (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                     07-JUN-1996;
                                                                                                                    07-JUN-1996;
                                                                                                                                 07-JUN-1995;
16-NOV-1995;
                               US5932703-A
                                                          03-AUG-1999
                                                                                                                                                                                                        Godiska R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY05871;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
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Gaps

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(STRD ) UNIV LELAND STANFORD JUNIOR. (LEUK-) LEUKOSITE INC.
                                                                                                                                                                                                                                                                                                                                                                                   / Match 97.2%;
Local Similarity 93.5%;
hes 87; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAY-2002 (first entry)
                                     J,
                                     Campbell
                                                           WPI; 2000-475957/41.
                                                                                                                                                                                                                                                                                                                                                              93 AA;
                                                                       N-PSDB; AAA58874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Misc-difference
                                                                                                                        inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US6320023-B1
                                    Butcher EC,
                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAO14046;
                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein
                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                  This represents a human macrophage derived chemokine (MDC). The invention provides a novel method of treating or preventing lentivirus (LV) infection or replication in a human subject, that comprises administering to the subject a composition comprising MDC or a derivative of MDC, or a nucleic acid encoding MDC or a derivative of MDC. The products can be used for treating or preventing LV infection or replication, particularly HIV infection or replication. The products can also be used for the prognosis for a LV infection, particularly an HIV infection and the MDC as a prognostic indicator. The methods can also be used with other LVs, e.g. simian immunodeficiency virus, feline.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                        Treatment or prevention of lentivirus, particularly HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Systemic memory T cell; CCR4; TARC; integrin dependent arrest; thymus and activation-regulated chemokine; vascular receptor; MDC; monokine derived chemokine; adhesion trigger; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                97.2%; Score 445; DB 20; Length 93; 93.5%; Pred. No. 3.7e-51; ive 0; Mismatches 6; Indels
                                                                                                                                                Garzino-Demo A, Markham PD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for in claim 19"
                                                                                                                                                                                                                                              Claim 16; Page 97-98; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A human monokine derived chemokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB07500 standard; Protein; 93 AA
                                                                       98WO-US19450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-JAN-2000; 2000WO-US00953
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                                                                                              97US-0931764
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match
Best Local Similarity 93.55
Best Local Similarity 93.55
Best Local Similarity 93.55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-OCT-2000 (first entry)
                                                                                                                                              Gallo RC,
                                                                                                                       (ALKU ) AKZO NOBEL NV
                                                                                                                                                                                  WPI; 1999-244024/20.
N-PSDB; AAX32817.
                                                                                                                                                                                                                                                                                                                                                                                                                        93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200041724-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JAN-1999;
                       WO9914237-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        saptens
                                                                       16-SEP-1998;
                                                                                              16-SEP-1997;
                                              25-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-JUL-2000
                                                                                                                                               Devico AL,
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB07500;
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The specification describes a method of modulating the trafficking of systemic memory T cells in a mammalian host. The method comprises administering a CCR4 modulating agent. It has been found that systemic administering a CCR4 modulating agent. It has been found that systemic Tells such as express high levels of CCR4. Ligands of CCR4 such as TARC (thymus and activation-regulated chemokine) and MDC (monokine derived chemokine) act as an adhesion trigger and, upon CCR4 binding, these cells undergo integrin dependent arrest to the appropriate vascular receptors. This arrest acts to localize the cells at the target site. The method modulates this triggering and CCR4 mediated co-chemotaxis to affect the localization of T cells in targeted tissues. The active agent may be a CCR4 agonist that acts to enhance T cell localization. Alternatively, it may be an antagonist that blocks CCR4 incoming train activity. A CCR4 angonist may be administered for the treatment of inflammation. The present sequence represents a human MDC.
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//note= "Mature macrophage-derived C-C chemokine, this is a specifically claimed region"
25..39
/note= "Specifically claimed region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        leukocyte; monocyte; calcium flux; chemotaxis; medical imaging; infection; inflammation; macrophage, Crohn's disease; rheumatoid arthritis; atherosclerosis; wound healing; angiogenesis; chemotherapy; radiation therapy; tumour.
                                                                                                                                                                                            Modulating the trafficking of systemic memory T cells in mammals by administering a CCR4 modulating agent, useful for the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 445; DB 21;
Pred. No. 3.7e-51;
0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human macrophage-derived C-C chemokine (MDC).
Rottman JB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1..24
/note= "Signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 38; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAO14046 standard; Protein; 93 AA
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Homo sapiens
             12-DEC-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                              chemokine (MDC) of the invention. Chemokines comprise a family of small secreted proteins which attract and activate leukocytes, thereby aiding in the stimulation and regulation of the immune system. C.C cytokines are subfamily known to activate monocytes, causing calcium flux and chemotaxis. The invention comprises a novel human MDC protein and nuclaic of the invention is useful in medical immaging (e.g. for immaging sites of infection, inflammation, and other sites having C.C chemokine receptor molecules. Inhibition of MDC is believed to be useful in treating diseases involving macrophages (e.g. Crohn's disease, rheumatched arthritis or atherosclerosis). Alternatively, augmenting the effects of MDC is believed to be beneficial to patients receiving the or was more than the content of the molists may be beneficial to patients receiving chemotherapy or radiation therapy and in the treatment of tumours.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Macrophage derived C-C chemokines useful in medical imaging and for the development of agents for controlling inflammation \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    defence; activation; eosinophil; monocyte; macrophage; T lymphocyte; T cell; basophil; gene therapy; tumour; cancer; neoplasis, infection; Raposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis; leukaemia; autoimmune disease; psoriasis; inflammation; allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                      The present sequence represents a novel human macrophage-derived C-C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chemokine beta 13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "given as encoded by CAC codon in AAT44026"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytokine beta-13 stimulates migration/activation of immune cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       97.2%; Score 445; DB 23;
93.5%; Pred. No. 3.7e-51;
.ive _0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW07604 standard; Protein; 93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rheumatoid arthritis; silicosis.
                                                                                                                                                                                              Claim 1; Fig 1; 22pp; English
                        95US-0479603.
                                                95US-0479603.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                               Sodiska R, Gray PW;
                                                                                                                    WPI; 2002-074410/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 Similarity
87; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference 45
                                                                       (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                 93 AA;
                                                                                                                                   N-PSDB; AAK98372
                      07-JUN-1995;
                                              07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-SEP-1997
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20-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
AAW07604
ID AAW07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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treating patients lacking chemokines. Ck beta-13 is useful for treating patients lacking chemokine beta-13 by gane therapy. Ck-beta-13 stimulates the invasion and activation of host defence cells making it useful for treating solid tumours, e.g. Kaposi's sarcoma, and for useful for treating solid tumours, e.g. Kaposi's sarcoma, and for enhancing resistance to acute and chronic infections, e.g. mycobacterial infections. The chemokine induces chemotractic migration of monocytes, neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to sites where they are needed. Eosinophils may be attracted to the site of a parasitic infection to kill parasite larvae. Ck-beta-13 also recruits debris-clearing and connective tissue promoting inflammatory cells, and is therefore used to stimulate wound healing, prevent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          scarring and treat liver cirrhosis, osteoarthritis and pulmonary fibrosis. Ck-beta-13 may also be used for treating leukaemia. T-cell mediated autoimmune diseases, psoriasis, to regulate haematopoiesis and to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the chemokine which is useful for treating certain autoimmune diseases, atherosclerosis, chronic inflammatory and infective diseases, allergic reactions, rheumatoid arthritis, silicosis and bone marrow failure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chemokine beta-13; human; CKbeta-13; immune system-related disorder; tumour; cancer; interstitial lung disease; leukaemia; lymphoma; sepsis; autoimmune disease; bone marrow stem cell colony formation inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human chemokine beta-13 - useful for treating solid tumours, leukaemia, infections, autoimmune disease, fibrotic disorders, psoriasis, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 93;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW07604 shows human chemokine beta-13 (Ck-beta-13), a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 440; DB 18;
Pred. No. 1.7e-50;
1; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW57881 standard; Protein; 93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 10; Page 46; 58pp; English.
                                                                                                                                                                  (HUMA-) HUMAN GENOME SCI INC.
(SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 96.1%;
Best Local Similarity 92.5%;
Matches 86; Conservative 1
95WO-US07294.
                                                                                   95WO-US07294.
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                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-043143/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence · 93 AA;
                                                                                                                                                                                                                                                                                            Seibel G;
                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; AAT44026
                                                                                   36-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW57881;
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WO9824908-A1

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interstitution. The polypeptide and nucleic parals (Cobetaris) of the channes in the mannes of the channes of disorders include tumours, cancers, interstitial lung disease and disorders include tumours, cancers, interstitial lung disease and disorders include tumours, cancers, interstitial lung disease and disorders included the cartain tissues in mammals with cancer of the immune system express enhanced/decreased levels of Cobeta-13 and mRNA encoding Cobeta-13, and diagnosis can be achieved by assaying Cobeta-13 and mRNA encoding Cobeta-13, and diagnosis can be achieved by assaying Cobeta-13 and mRNA encoding Cobeta-13, and diagnosis can be achieved by assaying Cobeta-13 and mRNA encoding cobeta-13, and diagnosis can be administered therapeutically in pharmaceutical compositions e.g. to treat immune system-related disorders as above, treat sepsis, inhibit bone marrow stem cell colony formation during cancer therapy, regulate haematopoiesis, stimulate wound healing care compositions compositions the polymorleotides may also be administered, especially to express Cobeta-13 polypeptide in hosts to treat dysfunctions associated with aberrant endogenous Cobeta-13 cativity. The polymorleotides are also useful for mapping of chromosomes/chromosome sites. The polypeptides are useful to screen for agonists and antagonists of Cooperationally e.g. as antagonists to treat and a service of the cooperation of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human chemokine beta-13 polypeptide - useful in diagnosis and treatment of immune-system related disorders e.g. cancer of the immune system, leukaemias, autoimmune diseases etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence is the human chemokine beta-13 (CKbeta-13) of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               subjects requiring CKbeta-13 reduction
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92.5%;
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                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME SCI INC
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N-PSDB; AAV40786.
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                                                                                                                                                                            05-DEC-1996;
                                                        11-JUN-1998
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Gaps ö Score 440; DB 19; Length 93; Pred. No. 1.7e-50; 1; Mismatches 6; Indels Query Match
Best Local Similarity 92.5'

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Search completed: July 28, 2003, 04:04:46 Job time: 20.3193 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd
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US-08-60-542-2
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US-08-60-542-3
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US-08-660-542-3
US-08-660-542-3
US-08-660-542-3
US-08-208-339A-4
US-08-373-346A-6
US-08-334-951-65
US-09-34-951-65
US-09-34-951-65
US-09-34-951-65
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Listing first 45 summaries
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Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
             Sequence
                                                Sequence
                                                                                                             Sequence
                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago STATE: 1llinois STATE: 1llinois COUNTRY: United States of America 21P: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                            US-08-679-493A-156
                                             US-08-173-209A-2
US-08-173-209A-2
US-08-77-492B-6
US-08-722-719-2
US-09-180-077-7
US-09-334-951-2
PCT-US95-15484-6
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JS-09-230-371A-25
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US-07-792-988-2
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US-08-936-772-5
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CLASSIFICATION 514
PRIOR APPLICATION 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PAPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 38,153
REGISTRATION NUMBER: 38,153
REFERENCE/POCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFRAX: 312/474-6300
                                                                                                                                                                                                                                                       ALIGNMENTS
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BDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
MOLECULE TYPE: peptide
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LOCATION: 1..69
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APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ANDERSS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
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                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,449
FILING DATE:
CLACCTICATOR
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97.2%; Score 445; DB 1; 93.5%; Pred. No. 1.7e-52;
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0; Mismatches
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                                                                                                                                                                                                                                                 CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: GASS, DAVId A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32779
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
: Illinois
XY: United States of America
60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1004
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MEDIUM TYPE:
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93 amino acids
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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Matches 87; Conservative
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: C
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                                              ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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                          COUNTRY:
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                                                               /note-"rhe amino acid at position 24 is selected from the group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
                                                                                                                                                                                                                                                                            /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, trreonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arguinne, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="The amino acid at position 30 is independently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="The amino acid at position 59 is independently
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, and cysteine.
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Patent No. 568827
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
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US-08-660-542-25
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Best Local Similarity
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US-08-480-449-2
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FERRARO, GREGORY D.
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CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
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      STREET: 000
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APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Campbell, James
APPLICANT: Wu, Lijan
TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION: WAS 1999-01-15
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 6
LENGTH: 93
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APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                          Score 445; DB 2;
Pred. No. 1.7e-52;
0; Mismatches 6
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97.2%; Score 445; DB 4;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6
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    Sequence 6, Application US/09232878 Patent No. 6245332
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Patent No. 6320023
GENERAL INFORMATION:
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Best Local Similarity 93.5%;
Matches 87; Conservative
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                    ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-660-542-2
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; ORGANISM: H. sapiens
US-09-232-878-6
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US-09-232-878-6
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1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
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S: Marshall, O'Toole, Gerstein, Murray & 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,603
FILING DATE:
CLASSIFICATION: 530
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; Sequence 2, Application PC/TUS9507294
; GENERAL INFORMATION:
   APPLICANT: LI ET AL.
   TITLE OF INVENTION: Human Chemokine Beta-13
   NUMBER OF SEQUENCES: 8
   CORRESPONDENCE ADDRESS: ADDRESSE: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART & OLSTEIN
   STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
97.2%; Score 445; DB 4;
Best Local Similarity 93.5%; Pred. No. 1.7e-52;
Matches 87; Conservative 0; Mismatches 6
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                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38.153
REFERENCE/DOCKET NUMBER: 27866/32780
TELECOMMUNICATION INFORMATION:
TELEPRONE: 312/474-0300
TELERAX: 312/474-0448
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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                                                                  STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
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APPLICATION NUMBER:
FILING DATE: June 5, 1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SYSTEM: MS-DOS
WORD PERFECT 5.1
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25 GPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRPGVVLLTFRDKXICADPRVPXX 84
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                                                                                                                                                                                                                                                                                                                                                                                   Sequence 30, Application US/08660542
Patent No 5932703
CENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NATA:
APPLICATION NUMBER: US/08/660,542
                                                                 Score 343; DB 2;
Pred. No. 5.9e-39;
0; Mismatches 6
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Pred. No. 8.2e-39;
0; Mismatches 6
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ATORNEY/AGENT INFORMATION:
NAME: Gass, David A.
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6500
TELEFAX: 312/474-0448
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COUNTRY: United States of America
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/559,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
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Best Local Similarity 91.3%;
Matches 63; Conservative
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1 Similarity 91.3%;
63; Conservative
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INFORMATION FOR SEQ ID NO:
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      ; MOLECULE TYPE: peptide US-08-660-542-31
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                                                                 Query Match
Best Local Similarity
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STREET: 6300 SCITY: Chicago
STATE: Illinois
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APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
                                                                                                                                                                                                                                                                                                97.2%; Score 445; DB 5; Length 93; .93.5%; Pred. No. 1.7e-52; tive 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPOTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
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ER: 27866/33318
                          325800-356
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COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 31, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REGISTRATION NUMBER: 36,134
REFRENCE/DOCKET NUMBER: 3258
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
TYPE: AMINO ACID
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 69 amino acids
                                                                                                                                                                                                                                                                                                                      Best_Local Similarity .93.5
Matches 87; Conservative
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                                                                                                                                                                                                               TOPOLOGY: LINEAR MOLECULE TYPE: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 32 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chicago
                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                         PCT-US95-07294-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-660-542-31
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                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
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Length 70;

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TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
6
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Macrophage Inflammatory Protein - 3 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 139; DB 1; Length 89;
; Pred. No. 2e-11;
13; Mismatches 30; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, N.W., SUITE 600
                                                                ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART & OLSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        325800-77
                                                                                                                                                                                                       COMPUTER READBLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: 1BM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION NUMBER: US/08/208,339
FILING DATE: 8 MARCH 1994
CLASSIFICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/08722719
Setent No. 6001606
GENERAL INFORMATION:
APPLICANT: ROBIN, STEVEN M.
APPLICANT: RUBIN, STEVEN M.
APPLICANT: LI, HADDONG
APPLICANT: ADAMS, MARK D.
TITLE OF INVENTION: THERAPEUTIC CO
TITLE OF INVENTION: THERAPEUTIC CO
TITLE OF INVENTION: THERAPEUTIC
TITLE OF INVENTION: (M-CIF);
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 PRPGVVLLTFRDKXICADP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |:|||:||| | : ||||||
PKPGVILLTKRGRQICADP 73
                                                                                                     6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30.3%;
38.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 36,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 30.3%
Best Local Similarity 38.0%
Matches 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 89 AMINO ACIDS
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 201-994-1744 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201-994-1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: LINEAR MOLECULE TYPE: PROTEIN
                      NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                                                                                                NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: DC
COUNTRY: USA
ZIP: 20005-3934
                                                                                                                              ROSELAND
                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                               COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-208-339A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-722-719-6
                                                                                                                              CITY: R
STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                         APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 322; DB 2; Length 69;
Pred. No. 3.9e-36;
2; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                       E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 60606-6402

ZIP: 60606-6402

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
IP: 6060-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFTCATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4, Application US/08208339A
Patent No. 5504003
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
                                                                                                                                             Sequence 32, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 70.3%;
Best Local Similarity 87.0%;
Matches 60; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-660-542-32
                        KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85 KMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KMILNKLSQ 69
85 KMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                       US-08-660-542-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-208-339A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
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4 LQTALLUVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRP 63
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Coleman, Roger
APPLICANT: Ocleman, Roger
APPLICANT: Will Cail G
APPLICANT: Sailhamer, Jeffrey J.
TILLE OF INVENTION: CHEMOKINE EXPRESSED IN FETAL SPLEEN,
TITLE OF INVENTION: ITS PRODUCTION AND USES
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

29.9%; Score 137; DB 1;
Best Local Similarity 38.2%; Pred. No. 3.2e-11;
Matches 29; Conservative 13; Mismatches 28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Palo Alto
COUNTR: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: DOS
SOFTWARE: FASTERO VERSION 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,123B
FILING DATE: 06-JUN-1995
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/375,346
FILING DATE: 19-JAN-1995
ATTORNEY/AGENT INFORMATION:
                                          CORRELL AFFLICATION NUMBER: US/08/375,346A
FILING DATE: 19-JAN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATE:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LUTHER, BARBARA J.
REGISTRATION NUMBER: 33,954
REFERENCE/DOCKET NUMBER: PF-0026 US
TELECHONE: (415) 855-0555
TELEPHONE: (415) 855-0572
                                                                                                                                                                                                                                                    PF-0026 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 6, Application US/08467123B Patent No. 5945506
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/375,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64 GVVLLTFRDKXICADP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56 GVILLTKRGRQICADP 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 6
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
STRANDEDNESS: single
TYPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANTI-SENSE: NO FRAGMENT TYPE: 1 ORIGINAL SOURCE: US-08-375-346A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-467-123B-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MKGLAAALLVLVCTWALC----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Coleman, Roger

APPLICANT: Coleman, Roger

APPLICANT: Gellhamer, Jeffrey J.

APPLICANT: Seilhamer, Jeffrey J.

TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,

TITLE OF INVENTION: ITS PRODUCTION AND USES

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: INCYTE PHARMACEUTICALS, INC.

STREET: 3330 HILLVIEW AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3; Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30; Indels
    MEDIUM TYPE: Floppy u.s., COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS COFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30.3%; Score 139; DB 3 38.0%; Pred. No. 2e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1488.0330007
                                                                                                                                                                                    PRIOR APPLICATION 1973
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,209
FILING DATE: 22-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/208,339
FILING DATE: 08-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/46,881
FILING DATE: 05-MAY-1995
PRIOR APPLICATION NUMBER: US 08/465,682
FILING DATE: 06-JUN-1995
PRIOR APPLICATION NUMBER: US 08/468,775
FILING DATE: 06-JUN-1995
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/722,719
FILING DATE: 30-SEP-1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/08375346A Patent No. 5605817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 PRPGVVLLTFRDKXICADP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |:|||:||| | : ||||| | PKPGVILLTKRGRQICADP 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 30.39
Best Local Similarity 38.09
Matches 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    : 89 amino acids amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; MOLECULE TYPE: protein US-08-722-719-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM CON OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-375-346A-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 LAAALLULVCTWALC----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKP 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 LQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRP 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Ruben, Steven M.
APPLICANT: L1, Haodong
TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1)
TITLE OF INVENTION: Polynucleotides and Polypeptides (As Amended)
FILE REFERENCE: 1488.0330008
CURRENT APPLICATION NUMBER: US/09/334,951
CURRENT PILING DATE: 1999-06-17
EARLIER PILING DATE: 1999-06-17
EARLIER FILING DATE: 1999-06-17
EARLIER FILING DATE: 1995-06-06
EARLIER PLICATION NUMBER: US 08/465,682
EARLIER PLICATION NUMBER: US 08/465,682
EARLIER APPLICATION NUMBER: US 08/468,775
EARLIER APPLICATION NUMBER: US 08/468,775
EARLIER PILING DATE: 1995-06-06
EARLIER PILING DATE: 1996-09-30
WINDOWN PARE: PLING DATE: US 08/722,719
                                                                                                                                                                                                                                                                                                                                                                          29.9%; Score 137; DB 2; Length 78; 38.2%; Pred. No. 3.2e-11; tive 13; Mismatches 28; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query, Match 29.9%; Score 137; DB 4; Length 89; Best Local Similarity 38.0%; Pred. No. 3.8e-11; Matches 30; Conservative 13; Mismatches 30; Indels
                                                   PF-0026-1 DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-334-951-6; Sequence 6, Application US/09334951; Patent No. 6451562
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NAME: Billings, Lucy J. REGISTRATION NUMBER: 36,749
                                            REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-555-0555
TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56 GVILLTKRGROICADP 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64 GVVLLTFRDKXICADP 79
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SEQ ID NO 6
LENGTH: 89
                                                                                                                                                                                                  LENGTH: 78 amino acids
                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 29.9
Best Local Similarity 38.2
Matches 29; Conservative
                                                                                                                                                                                                                                                     single
                                                                                                                                                                                                                                                                                            ; MOLECULE TYPE: peptide US-08-467-123B-6
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                                                                                                                                                                                                                         amino acid
                                                                                                                                                                                                                                                                             linear
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RESULT 15 US-09-230-637-26

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July 28, 2003, 04:04:49; Search time 12.6996 Seconds (without alignments) 869.687 Million cell updates/sec
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1 MARLQTALLVVLVLLAVALQ.....XICADPRVPXXKMILNKLSQ
GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                451899 seqs, 118759770 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                  OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                 US-09-509-165A-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                             Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                          Run on:
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## Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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2: /cgn2\_6/ptodata/2/pubpaa/USO6\_NEW\_PUB.pep:\*
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4: /cgn2\_6/ptodata/2/pubpaa/USO6\_PUBCOMB.pep:\*
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6: /cgn2\_6/ptodata/2/pubpaa/USO7\_PUBCOMB.pep:\*
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17: /cgn2\_6/ptodata/2/pubpaa/USO0\_NEW\_PUB.pep:\*

Published\_Applications\_AA:\*

Database :

			6, Appli	7	2, 1	2, Appli	2, Appli	3, Appli	437	7	6, Appli	9	792, App	6, Appli	34, Appl	34, Appl	28, Appl	6, Appli
		Description	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence
SUMMARIES		ID	US-09-837-446-6	US-09-811-088-2	US-10-314-410-2	US-09-908-599-2	us-09-908-600-2	US-10-001-221A-3	US-09-864-761-43730	US-10-001-221A-7	US-09-334-923A-6	US-09-334-954A-6	US-09-925-302-792	US-10-158-366-6	US-09-834-795A-34	US-09-834-794A-34	US-09-792-793A-28	US-10-001-221A-6
	•	. BB	10	11	15	10	10	15	10	15	10	10	10	15	10	12	11	15
	% Query	Length	93	93	93	93	93	68	37	29	88	83	46	78	88	89	69	78
	% Query	Match	97.2	97.2	97.2	96.1	96.1	50.4	42.1	38.8	30.3	30.3	30.3	29.9	28.8	28.8	27.3	. 27.1
		Score	445	445	445	440	440	231	193	177.5	139	139	139	137	132	132	125	124
	Result	NO.	٦	7	m	4	S	9	7	80	6	10	11	12	13	14	15	16

US-09-811-088-2

RESULT 2

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Sequence 65, Appl Sequence 1, Appl Sequence 2, Appl Sequence 29, Appl Sequence 29, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 2, Appl Sequence 3, Appl Sequence 3, Appl Sequence 2, Appl Sequence 3, Appl Sequence 5, Appl Sequence 6, Appl Sequence 6, Appl Sequence 6, Appl Sequence 6, Appl Sequence 6, Appl Sequence 6, Appl Sequence 7, Appl Sequence 6, Appl Sequence 6, Appl Sequence 1, Appl Sequence 1, Appl Sequence 2, Appl Sequence 3, Appl Sequence 3, Appl Sequence 3, Appl Sequence 3, Appl Sequence 3, Appl Sequence 3, Appl	•	10: Length 93;  imilarity 93.5%; Pred. No. 136-49;  Conservative Mismatches 6; Indels 0; Gaps 0;  MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
US-09-334-923A-65 US-08-927-939-21 US-09-144-838-9 US-09-834-795A-29 US-09-834-795A-29 US-09-834-794A-29 US-09-537-858-1 US-10-057-275-8 US-10-057-275-8 US-10-057-275-8 US-10-29-705-12 US-10-159-064-86 US-09-334-924A-2 US-09-334-924A-2 US-09-334-954A-2 US-09-334-954A-2 US-09-334-954A-2 US-09-372-348-5 US-09-372-348-5 US-09-372-348-6 US-09-372-348-6 US-09-372-348-6 US-09-372-348-6 US-09-372-348-6 US-09-372-348-6 US-09-372-348-6 US-09-372-348-6 US-09-372-348-6 US-09-372-348-6 US-09-372-348-7 US-09-372-348-7 US-09-372-348-7 US-09-372-348-7 US-09-372-348-7 US-09-372-348-7	ALIGNMENTS 46 f Systemic Memory 9/837,446 ,878 rsion 4.0	97.2%; Score 445; DB 10; Length larity 93.5%; Pred. No. 4.3e-49; Conservative 0; Mismatches 6; Indel RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYNRYRLP
	/0983744 e C. es J. s B. ation oi ficking ON 1-04-17 09/232. 1-15	. 2%; . 5%; e LAVAL       LAVAL
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-446-6  be 6, Application US/098374  No. US20020019341A1  INFORMATION: ANT: Butcher, Eugene C. ANT: Campbell, James J. ANT: Rottman, James B. ANT: Willy Modulation of INVENTION: Trafficking REFERENCE: STAN-110CON  TRAPLICATION NUMBER: US/0  TFILING DATE: 2001-04-17  PRE: FSELING DATE: 1999-01-15  TOF SEQ ID NOS: 6  NO 6  H: 93  PRT  IISM: H. Sapiens	97. Jarity 93. Conservative LQTALLVVLVLL H
	6-6 Applicatio US200200193 US200200193 US200200193 E Butcher, E Campbell, E Rottman, E W, Lijan INVENTION: MINVENTION: MINVENTION: MINVENTION NUM LICATION NUM LICATION NUM LICATION NUM FE SEC ID NOS: FestSEQ for 6 93 FestSEQ for 6 6 6-6 6-6	h Similarity 87; Conser 1 MARLQTALL 1 MARLQTALL
123 120.5 120.5 120.5 120.5 120.5 120.5 120.5 120.5 110 1119 1119 1119 1119 1119 1119 1119	-446 NO. O. O	Query Match Best Local Si Matches 87;
	RESULT 1 US-09-837- Sequence Patent N GENERAL APPLICA	Query Best Match Qy Db

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Score 445; DB 15;
Pred. No. 4.3e-49;
0; Mismatches 6;
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Pred. No. 1.9e-48;
1; Mismatches 6;
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SEIBUL, GEORGE
TITLE OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRPGVVLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
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TITLE OF INVENTION: Human Chemokine Beta 13
FILE REFRENCE: PF177P3
CURRENT APPLICATION: HUMBER: US/09/908,599
CURRENT FILING DATE: 2001-07-20
PRIOR PPLICATION NUMBER: 09/432,768
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1996-12-05
NUMBER OF SEQ ID NOS: 22
SOFTWARE: PATENTIN Ver: 2.0
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ
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                          PRIOR FILING DATE: 1999-07-16
PRIOR APPLICATION NUMBER: US 08/938,365
PRIOR FILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 93
       PRIOR APPLICATION NUMBER: US 09/354,809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-908-599-2

; Sequence 2, Application US/09908599

; Patent No. US20020055147A1

; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                            Ouery Match
Best Local Similarity 93.5%;
Matches 87; Conservative
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Best Local Similarity 92.5%;
Matches 86; Conservative
                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens US-10-314-410-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-09-908-599-2
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                                                                                                                                                                                                             TYPE: PRT
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                                    GENERAL INCOMMATION:
APPLICANT: GearIng, David P.
APPLICANT: Borny Yang
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES
FILE REPERENCE: 0734 - 324001
CURRENT PAPLICATION NUMBER: US/09/811,088
CURRENT FILING DATE: 2000-11-14
PRIOR APPLICATION NUMBER: US 09/712,726
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
PRIOR PILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-09-26
NUMBER OF SEC ID NOS: 24
SOFTWARE: PRESEQ FOR WINDOWS VERSION 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Holtzman, Douglas A.
APPLICANT: Holtzman, Douglas A.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES
TITLE OF INVENTION: USES
TITLE OF INVENTION: USES
TITLE OF INVENTION: USES
CURRENT APPLICATION NUMBER: US/10/314,410
CURRENT FILING DATE: 2002-12-06
PRIOR PELICATION NUMBER: US/09/811,088
PRIOR PELICATION NUMBER: US 09/712,726
PRIOR FILING DATE: 2000-11-14 08/820,364
PRIOR APPLICATION NUMBER: US 09/77,421
PRIOR FILING DATE: 2001-01-10
PRIOR FILING DATE: US 09/757,421
PRIOR PELICATION NUMBER: US 08/843,652
PRIOR PELICATION NUMBER: US 08/843,652
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: US 08/843,651
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Pred. No. 4.3e-49;
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Sequence 2, Application US/09811088
Patent No. US20020160446A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 97.2%;
Best Local Similarity 93.5%;
Matches 87; Conservative (
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Length 93;
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              Indels
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STREET: 9410 KEY WEST AVENUE
CITY: ROCKVILLE,
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85 KMILNKLS 92 | :|:||| 61 KKLLHKLS 68

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Publication No. US20030108515A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Schall, Thomas J. Fremack, Brett Howard, Maureen
TILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
PRIOR PELING DATE: 2001-10-30
PRIOR FILING DATE: 2001-10-30
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 93;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 50.4%; Score 231; DB 15; Best Local Similarity 58.8%; Pred. No. 4.7e-22; Matches 40; Conservative 13; Mismatches 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 440; DB 10;
Pred. No. 1.9e-48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
                                                                                                                                       CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-041-2001
CLASSIFICATION: AURINOWN>
PRIOR APPLICATION: AURINOWN>
PRIOR APPLICATION NUMBER: 09/484,221
FILING DATE: CUNKNOWN>
ATORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELEORMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEPHONE: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
**TOPOLOGY: linear
;
**MOLECULE TYPE: protein
;
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 96.1%;
Best Local Similarity 92.5%;
Matches 86; Conservative
COUNTRY: 20850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-001-221A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-001-221A-3
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LENGTH: 68
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us-09-509-165a-25.rapb

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TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynucleotides
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynucleotides
TITLE OF INVENTION: As Amended)
FILE BEFERENCE: 1486 0330004
CURRENT APPLICATION NUMBER: US 08/208,339
PRIOR PLILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: US 08/446,881
PRIOR FILING DATE: 1995-06-06
PRIOR PLING DATE: 1995-06-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MKGLAAALLVLVCTMALC----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
                                                                                                                                       1 MARLQTALLVVLVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
                                                                                                                                                                      1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
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                                                                                   Gaps
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Batent No. US20020044941A1

GENERAL INFORMATION:

TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies

FILE REFERENCE: PA104

CURRENT APPLICATION NUMBER: US/09/925,302

CURRENT FILING DATE: 2001-08-10

PRIOR FILING DATE: 2000-03-08

PRIOR FILING DATE: 2000-03-08

PRIOR FILING DATE: 1999-03-12

NUMBER OF SEQ ID NOS: 896

SOFTWARE: PatentIn Ver. 2.0
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; Pred. No. 3.1e-10;
13; Mismatches 30;
                            30.3%; Score 139; DB 10; 38.0%; Pred. No. 3.1e-10;
                                                                                13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/09334954A Patent No. US20020076746Al
                                                                                                                                                                                                                                                 61 PRPGVVLLTFRDKXICADP 79
|:|||:||| | : |||||
55 PKPGVILLTKRGRQICADP 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 PRPGVVLLTFRDKXICADP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |:||:||| | : ||||| | 55 PKPGVILLTKRGRQICADP 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 30.3%;
Best Local Similarity 38.0%;
Matches 30; Conservative 1:
                            Query Match 30.3%
Best Local Similarity 38.0%
Matches 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Ruben, Steven M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
US-09-925-302-792
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SOFTWARE: Pate
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-334-954A-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
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APPLICANT: Li, Haodong
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As Amende FILE REFERENCE: 1488 0330000
CURRENT APPLICATION NUMBER: US/09/334,923A
CURRENT FILING DATE: 1994-06-17
PRIOR PRIOR PAPLICATION NUMBER: US 08/408,339
PRIOR FILING DATE: 1995-05-06
PRIOR PILING DATE: 1995-06-06
PRIOR PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR PILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-09
                                                                                                                                                                                                                                                                                         Sequence 7, Application US/10001221A

Sequence 7, Application US/20030108515A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14 BACCOMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT APPLICATION NUMBER: 09/834,814
PRIOR FILING DATE: 2001-10-30
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 7
LENGTH: 67
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33 DSV-----CCRDYVRYRLPLXVVXHFXWTSDSCPRPGVVLLTFRDKXICADPRVPXXKMI 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 DSVSIPITCCQDYIRHPLPSRLVKEFFWTSKSCRKPGVVLITVKNRDICADPRQVWVKKL 62
                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 67;
     Length 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38.8%; Score 177.5; DB 15; Length 52.3%; Pred. No. 2.9e-15; Live 11; Mismatches 15; Indels
                                                            Indels
                                                                                                                                            1 ANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGV 37
                                                                                                                29 ANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRPGV 65
  Score 193; DB 10;
Pred. No. 1.6e-17;
                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Chimeric molecule US-10-001-221A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/09334923A Patent No. US20020061551A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Artificial sequence
ch 42.1%;
l Similarity 91.9%;
34; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 52.3*
Thes 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin Ver. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens
US-09-334-923A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88 LNKLS. 92
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63 LHKLS 67
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-334-923A-6
                                                                                                                                                                                                                                                    RESULT 8
US-10-001-221A-7
  Query Match
                               Best Local
Matches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
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2 LAAALLULUCTMALC---SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKP 55
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US-00-834-794A-34

Sequence 34, Application US/09834794A

Publication No. US20030026777A1

GENERAL INFORMATION:
APPLICANT: Lawrence, Papsidero
APPLICANT: Lawrence, Papsidero
APPLICANT: Jana, Frustaci
TITLE OF INVENTION: Detection and Treatment of Breast Cancer
FILE REFERENCE: 3380/11127-US/09/834,794A

CURRENT APPLICATION NUMBER: US/09/834,794A

CURRENT FILING DATE: 1998-09-03

PRIOR FILING DATE: 1998-09-03

PRIOR PLILORION NUMBER: 60/092,155

PRIOR PLILORION NUMBER: 60/092,155

PRIOR FILING DATE: 1998-07-09

NUMBER OF SEQ ID NOS: 35

SOFTWARE: PatentIn version 3.0

LENGTH: 89
                                                                                                                                                                                                                                                                                                           APPLICANT: Lawrence, repside to APPLICANT: Lawrence, reflection and Treatment of Breast Cancer; TITLE OF INVENTION: Detection and Treatment of Breast Cancer; FILE REFRENCE: 3380/11127-US3; CURRENT APPLICATION NUMBER: US/09/834,795A; CURRENT FILING DATE: 2001-04-12; PRIOR APPLICATION NUMBER: 09/146,580; PRIOR FILING DATE: 1998-09-03; PRIOR FILING DATE: 1998-01-20; PRIOR APPLICATION NUMBER: 60/071,899; PRIOR RILING DATE: 1998-01-20; PRIOR APPLICATION NUMBER: 60/092,155; PRIOR PELING DATE: 1998-07-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 89;
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; Pred. No. 2.4e-09;
13; Mismatches 31;
                                                                                                                                                                                                                             Sequence 34, Application US/09834795A
Patent No. US20020076710A1
GENERAL INFORMATION:
APPLICANT: Lawrence, Papsidero
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 PRPGVVLLTFRDKXICADP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |:|||:||| | : ||||
55 PKPGVILLTKRGRQDCADP 73
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36.7%;
                                                                       64 GVVLLTFRDKXICADP 79
                                                                                                ||:||| | : |||||
56 GVILLTKRGRQICADP 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 35
SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 28.8%
Best Local Similarity 36.7%
Matches 29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                        JS-09-834-795A-34
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LENGTH: 89
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                                                                                                                                                                                                                        1 MARLQTALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
                                                                                                                                                                                                                                                  TITLE OF INVENTION: CHEMOKINE EXPRESSED IN FETAL SPLEEN, ITS PRODUCTION AND USES
                                                                                                                                     Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 78;
                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/467,123B
APLICATION NUMBER: US/08/467,123B
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0026-1 DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 29.9%; Score 137; DB 15; Best Local Similarity 38.2%; Pred. No. 4.8e-10; Matches 29; Conservative 13; Mismatches 28;
                                                                                                                                     30.3%; Score 139; DB 10; 38.0%; Pred. No. 3.4e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                 13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEO Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/158,366
FILING DATE: 29-May-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE DESCRIPTION: SEQ ID NO: 6: US-10-158-366-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 3174 Porter Drive CITY: Palo Alto STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-555-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/10158366
Publication No. US20020142398A1
GENERAL INFORMATION:
APPLICANT: Coleman, Roger
                                                                                                                                                                                                                                                                                                                61 PRPGVVLLTFRDKXICADP 79
                                                                                                                                                                                                                                                                                                                                     |:|||:||| | : |||||| 63 PKPGVILLTKRGRQICADP 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 78 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 415-845-4166 INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 94304
COMPUTER READABLE FORM:
                                                                                                                              Query Match
Best Local Similarity 38.08.
Matches 30; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                         TYPE: PRT
CORGANISM: Homo saplens
US-09-925-302-792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
SEQ ID NO 792
LENGTH: 97
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RESULT 12

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; ORGANISM: Homo sapiens US-09-834-794A-34
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GENERAL INFORMATION:

APPLICANT: MCDONALD, John R.

APPLICANT: MCDONALD, John R.

APPLICANT: MCDONALD, John R.

APPLICANT: MCDONALD, JOHN R.

TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMAGE AND TITLE OF INVENTION: OTHER INFLAMMATORY CONDITIONS AND DISORDERS

TITLE OF INVENTION: OTHER INFLAMMATORY CONDITIONS AND DISORDERS

CURRENT APPLICATION NUMBER: US/09/792,793A

CURRENT FILING DATE: 2001-02-22

SOFTWARE: PATENTIN Ver. 2.0

SEQ ID NO 28

LENGTH: 69
                                                                                                    1 MARLQTALLUVULVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
                                                                                                                                   1 MKGLAAALLVLVCTWALC----SCAQVGTNKE--LCCLVYTSWQIPQKFIVDYSETSPQC 54
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28.8%; Score 132; DB 12; Length 89; Illarity 36.7%; Pred. No. 2.4e-09; Conservative 13; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  : OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4) US-09-792-793A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 125; DB 11; Length 69;
Pred. No. 1.4e-08;
9; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Search completed: July 28, 2003, 04:20:04 Job time: 12.6996 secs
                                                                                                                                                                                                                                                                                                                                                                            Sequence 28, Application US/09792793A Patent No. US20020168370A1
                                                                                                                                                                                                  61 PRPGVVLLTFRDKXICADP 79
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55 PKPGVILLTKRGRQDCADP 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 27.3%;
Best Local Similarity 44.2%;
Matches 23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: homo sapien
FEATURE:
  Query Match
Best Local Similarity
Matches 29; Conserva
                                                                                                                                                                                                                                                                                                                                                     US-09-792-793A-28
                                                                                                                                                                                                                                                                                                                                RESULT 15
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Sequence

Sequence Sequence

Sequence

Sequence 2, Sequence 12 Sequence 2,

Sequence 2, Appli Sequence 2007, Appli Sequence 2, Appli Sequence 2, Appli

Scoring table:

Searched:

Database

Perfect score:

Run on:

Sednence:

Appli Appli Appli Appli Appli Appli Appli Appli

Sequence 2

Sequence 2, Sequence 2, Sequence 2, Sequence 41, Sequence 41, Sequence 41, Sequence 46, Sequence 10, Sequence 31,

Sequence

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Sequence 25, Application US/08558658
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerstein, Murray & Borun
South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF INVENTION:

NUMBER OF SEQUENCES: 25

CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & B STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 6606-6402

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: I
                                                                           US-08-760-117-3

US-08-760-117-3

US-08-911-64-2

US-08-931-764-2

US-08-931-764-2

US-08-931-764-2

US-08-931-104-2

US-08-91-107-2

US-09-067-447-2

US-09-067-447-2

US-09-067-447-2

US-09-1657-2

US-09-101-108-2

US-09-760-481-204-2

US-09-760-481-204-2

US-09-760-481-204-2

US-09-101-101-101-288-2007-2

US-09-101-101-288-2007-2

US-09-908-101-288-2

US-09-908-101-288-2
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-558-658-25
Sequence 25, Appl
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562.075 Million cell updates/sec
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                                                                                                                                                                     July 28, 2003, 04:00:39; Search time 106.676 Seconds
                                                                                                                                                                                                                                                                                                                   458
1 MARLQTALLVVLVLLAVALQ.....XICADPRVPXXKMILNKLSQ
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| /cgn2_6/ptodata/1/paa/PCTUS_COMB.ppp:*
| /cgn2_6/ptodata/1/paa/US06_COMB.ppp:*
| /cgn2_6/ptodata/1/paa/US08_COMB.ppp:*
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/ptodata/1/paa/US092_COMB.pep:*
/ptodata/1/paa/US093_COMB.pep:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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/ptodata/1/paa/US096_COMB.
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US-09-067-447-25
US-09-067-447-25
US-09-067-447-25
US-09-067-447B-25
US-09-509-165A-25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                               OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length
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97.4
97.4
97.4
97.4
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Score

Result Š

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TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC. NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="The amino acid at position 24 is selected from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, trreonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
                                                                                                                                                                                                                                                                                                                                                3: Marshall, O'Toole, Gerstein, Murray & Borun
6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
ELLOATION NUMBER: US/08/939,107
FILING DATE:
         38,153
IER: 27866/33318
                                                                                                                                                                                                                                                                                                                                                                                 CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION UNBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTONREY/AGENT INFORMATION:
NAME: Gass, David A
                                                                                                                                          Sequence 25, Application US/08939107 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                    APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: . misc_feature
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION:
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OTHER INFORMATION:
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OTHER INFORMATION:
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STREET: 63
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                                                                                                                  US-08-939-107-25
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                                                                                                  RESULT 2
                                염
                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="The amino acid at position 24 is selected from the group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methlonine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, triconine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="The amino acid at position 30 is independently selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note-"The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note-"The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arginine, histidine, asparate, glutamate, asparagine, glutamine, and cysteine."
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Pred. No. 2.2e-48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97.4%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                         38,153
ER: 27866/33009
NAME: CLL.
REGISTRATION NUMBER: 27866
REFERENCE/DOCKET NUMBER: 27866
TELECOMMUNICATION: TELEPHONE: 312/474-6300
""" FFAX: 312/474-6448
                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
STRANDEDNESS: single.
                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature
OTHER INFORMATION:
OTHER INFORMATION: /not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
OTHER INFORMATION:
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                                                                                                                TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide
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OTHER INFORMATION:
OTHER INFORMATION:
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OTHER INFORMATION:
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LOCATION: 1..69
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OTHER INFORMATION:
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/note="The amino acid at position 24 is selected from group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, trreonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cystelne, and methionine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="The amino acid at position 59 is independently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="The amino acid at position 60 is independently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                selected from the group consisting of valine, serilysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine.
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                                                                                                                                                                            REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                     08/558,658
                                                                                     08/479,620
                     APPLICATION NUMBER: 08/55
FILING DATE: 16-NOV-1995
                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/47
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
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LENGTH: 93 amino acids
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                       Gass, David A.
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APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
                                   /note="The amino acid at position 30 is independently selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate,
                                                                                                                                                                                             /note="The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."
                                                                                                                                                                                                                                                                                                                                    /note="The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arguine, histidine, aspartate, glutamate, asparagine, glutamine, and oysteine."
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                                                                                                          glutamate, asparagine, glutamine, and cysteine
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South Wacker Drive
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PatentIn Release #1.0, Version #1.30
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100.0%; Pred. No. 2.2e-48;
iive 0; Mismatches 0;
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STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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6300 Sears Tower, 233
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
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APPLICATION NUMBER: 08/93:
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
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STREET: 63
                                                                                                                                                  NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY:
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US-09-067-447-25
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Sequence 25, Application US/09067447B
GENERAL INFORMATION:
APPLICANT: GTAY, David H.
APPLICANT: Chantry, David H.
APPLICANT: Deceley, Michael C.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MC=
TITLE OF INVENTION: ACTIVITY
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
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                                                                              9
       1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
                                                3: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
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APPLICATION NUMBER: US/09/067,447B
                                                                                                                                                                                          61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                     61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
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COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATURE SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ver
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FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/58,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: 07-JUN-1995
APPLICATION NUMBER: 07-JUN-1995
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
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TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 25
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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STRANDEDNESS: single
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                 RESULT 5
US-09-067-447B-25
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APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: RAPORT, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
FILE REFERENCE: 27866/34404 28
CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT FILING DATE: 1998-04-28
EARLIER PILING DATE: 1998-06-06
EARLIER PILING DATE: 1998-06-06
EARLIER APPLICATION NUMBER: 08/660,542
EARLIER APPLICATION NUMBER: 08/58,658
EARLIER PILING DATE: 1995-11-16
EARLIER PILING DATE: 1995-11-16
EARLIER FILING DATE: 1995-06-07
NUMBER: OF SEQ ID NOS: 44
SCOFTWARE: PatentIn Ver. 2.0
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OTHER INFORMATION: The amino acid at position 24 is selected from the OTHER INFORMATION: group consisting of arg, gly, ala, val, leu, ile, OTHER INFORMATION: pro, ser, thr, phe, tyr, trp, aspartate, OTHER INFORMATION: glutamate, asn, gln, cys, and met
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OTHER INFORMATION: The amino acid at position 27 is independently OTHER INFORMATION: selected from the group consisting of lys, gly, OTHER INFORMATION: ala, val, leu, ile, pro, ser, thr, phe, tyr, tr OTHER INFORMATION: aspartate, glutamate, asn, gln, cys, and met
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100.0%; Pred. No. 2.2e-48;
tive 0; Mismatches 0;
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                                                                                                                                                                                                                    61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
   0; Mismatches
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Matches 93; Conserv
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Best Local Similarity 93.5'
Matches 87; Conservative
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NAME/KEY: misc_feature
LOCATION: (30)
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   ID NOS:
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   NUMBER OF SEQ
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PCT-US00-00953-6
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LENGTH: 93
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                                                                                                                                                                                                        selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, appartate, glutamate, asparagine, glutamine, cysteine, and methionine."
   aspartate, glutamate, asparagine, glutamine, cysteine
                                                                                                                                                                                     /note="The amino acid at position 27 is independently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="The amino acid at position 30 is independently selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
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CURRENT APPLICATION NUMBER: US/09/509,165A
CURRENT FILING DATE: 1996-04-28
PRIOR APPLICATION NUMBER: 09/067,447
PRIOR FILING DATE: 1997-09-26
PRIOR FILING DATE: 1997-09-26
PRIOR FILING DATE: 1996-06-07
PRIOR PRILICATION NUMBER: 08/660,542
PRIOR FILING DATE: 1996-116
PRIOR FILING DATE: 1995-11-16
PRIOR FILING DATE: 1995-11-16
PRIOR FILING DATE: 1995-10-07
PRIOR FILING DATE: 1995-06-07
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                                                                                                                NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
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                                                                                                                                                                                                                                                                                                                                                                                                                 'EATURE:
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OTHER INFORMATION: Xaa = tyr, ser, lys, arg, his, aspartate, glutamate, asn, gln, OTHER INFORMATION: cys
NAME/KEY: misc_feature
LOCATION: (50)
OTHER INFORMATION: Xaa = glu, lys, arg, his, gly, or ala
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ser, lys, arg, his, aspartate, glutamate, asn, glm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Xaa = val, ser, lys., arg, his, aspartate, glutamate, asn, gln,
OTHER INFORMATION: cys
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                                            OTHER INFORMATION: Description of Artificial Sequence: Human MDC Analog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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met
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                                                                                                                OTHER INFORMATION: Xaa = arg, gly, ala, val, leu, ile, OTHER INFORMATION: pro, ser, thr, phe, tyr, trp, aspartate, OTHER INFORMATION: glutamate, asn, gln, cys, or met NAME/KEY: misc_feature
LOCATION: (27)
OTHER INFORMATION: Xaa = lys, gly,ala, val, leu, ile, pro, so OTHER INFORMATION: aspartate, glutamate, asn, gln, cys, or m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 93
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APPLICANT: Campbell, James
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: W. Lijan
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: PCT/US00/00953
CURRENT FILING DATE: 2000-01-14
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0; Mismatches
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ORGANISM: Artificial Sequence
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3: Marshall, O'Toole, Gerstein, Murray & Borun
6300 Sears Tower, 233 South Wacker Drive
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APPLICATION NUMBER: US/08/558,658
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APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEBRAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97.2%;
                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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nes 87; Conservative
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WOLECULE TYPE: protein
US-08-479-620-2
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                                    Chicago
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   ADDRESSEE:
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US-08-558-658-2
                                        CITY: C
STATE:
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Gaps
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Pred. No. 3e-48;
0; Mismatches 6; Indels
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GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVEWION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                  Sequence 2, Application US/08464594
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                        61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                         61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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APPLICATION NUMBER: US/08/464,594
FILING DATE: June 5, 1995
FILING DATE: June 5, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER REDBLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
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NAME: FERRARO, GREGORY D.
REGIESTRATION NUMBER: 36,134
REFERENCE/CDCKET NUMBER: 325;
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 201-994-1744 INFORMATION FOR SEQ ID NO: 2:
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Best Local Similarity 93.5%;
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                                                                                                                                                                                                                                                                                                                                                         CITY: ROSELAND
STATE: NEW JERSEY
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US-08-464-594-2
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US-08-479-620-2
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1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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GENERAL INFORMATION:
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEWOKINE AND CHEMOKINE
TITLE OF INVENTION: MACROPHAGE DERIVED CHEWOKINE AND CHEMOKINE
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: MACROPHAGE
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STREET: 111nois
STREET: 111nois
COUNTRY: United States of America
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                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,620
FILING DATE:
CLASSIFICATION: 536
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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Pred. No. 3e-48;
0; Mismatches
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ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REGISTRATION NUMBER: 27866/32628
STATE: Illinois
COUNTY: United States of America
ZIP: 6066-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 445; DB 12; Length 93;
Pred. No. 3e-48;
0; Mismatches 6; Indels
                                                                                                                                                                                                                          APPLICANT: Gearing, David P.
APPLICANT: Pan, Yang
TITLE OF INVENTION: THYMOTAXIN AND USES THEREFOR
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
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                                                            61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/820,364
FILING DATE: 12-MAR-1997
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                                         61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ
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ADDRESSEE: DNAX Research Institute
                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Fish & Richardson, P.C. STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 12, Application US/08925857 GENERAL INFORMATION:
                                                                                                                                                                                 Sequence 2, Application US/08820364 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION
TELEPHONE: 617-542-6070
TELEFAX: 617-542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 97.2%;
Best Local Similarity 93.5%;
Matches 87; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Melklejohn, Ph.D.,
REGISTRATION NUMBER: 35,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93 amino acids
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CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
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ZIP: 02110-2804
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STATE:
                                                                                                                                          RESULT 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Chang, Ming-shi
APPLICANT: Andrew, David P.
TITLE OF INVENTION: NOVEL PROTEIN WITH CHEMOKINE ACTIVITY
NUMBER OF SEQUENCE: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Amgen Inc.
                                                                                                                                                                                                                                                                                                              DB 9; Length 93;
                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/760,127
FILING DATE: 03-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 445; DB 11;
Pred. No. 3e-48;
0; Mismatches 6;
                                                                                                                                                                                                                                                                                                            Score 445; DB 9,
Pred. No. 3e-48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSO 93
                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
          38,153
FP 27866/33009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SSEE: Amgen Inc.
F: 1840 De Havilland Drive
Thousand Oaks
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: A-429 TELECOMMUNICATION INFORMATION:
                                REFERENCE/DOCKET NUMBER: 2786
TELECOMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELERAX: 312/474-60448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/08760127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Whiteford, Wendy A.
REGISTRATION NUMBER: 36,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (805) 447-1008
TELEFAX: (805) 447-1000
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 97.2%;
Best Local Similarity 93.5%;
Matches 87; Conservative
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1 Similarity 93.5%;
87; Conservative
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                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-558-658-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; MOLECULE TYPE: protein US-08-760-127-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 91320
COMPUTER READABLE FORM:
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                                                                                                                                                                                                      amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
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Best Local 3
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ATTORNEY AGENT INFORMATION:
NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 8769
TELECOMMUNICATION INFORMATION:
TELEFAX: 212-90-909
TELEFAX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
TYPE: amino acid
TYPE: amino acid
TYPE: amino acid
TOPOLOGY: linear
US-08-931-764-2
                                                         18,872
                                                                                                                                                                                                                                                                                                                                          97.28;
93.58;
                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 93.55
Matches 87; Conservative
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US-08-931-764B-2
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APPLICANT: Pal, Ranajit
APPLICANT: Pal, Ranajit
APPLICANT: Gallo, Robert C.
APPLICANT: Garant Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: AA ANTI-HIV AGENT FOR THE TREATMENT AND PREVENTION
TITLE OF INVENTION: OF LENTIVIRUS INFECTION
NUMBER OF SEQUENCES:
ADDRESSEE: Pennie & Edmonds
ADDRESSEE: Pennie & Edmonds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
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                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/925,857
FILING DATE: 09-SEP-1997
CLASSIFICATION: 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                                                                                                                                                                               CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION UNDBER: US 60/025,724
FILING DATE: 10-SEP-1996
ATTORNEY AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0614K
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UMBER: US/08/931,764
To be assigned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FASTEM: DOS
SOFTWARE: FASTESD Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/931,
FILING DATE: To be access
901 California Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/08931764 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 650-496-1200
INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; MOLECULE TYPE: protein US-08-925-857-12
                                     California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amino acid
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                    Palo Alto
                                                                            94304-1104
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ZIP: 10036/2711
                                                         USA
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                                                     COUNTRY:
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                  CITY:
STATE:
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Sequence 2, Application US/08931764B

Sequence 2, Application US/08931764B

GENERAL INFORMATION:
APPLICANT: Devico, Anthony L.
APPLICANT: Pal, Ranajtt
APPLICANT: Galo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-viral
TITLE OF INVENTION: Infection
TITLE OF INVENTION: Infection
FILE REFERENCE: MC
CURRENT APPLICATION NUMBER: US/08/931,764B
CURRENT PILLIO BATE: 1997-09-16
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                            1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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                                                             Gaps
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Score 445; DB 13; Length 93;
Pred. No. 3e-48;
0; Mismatches 6; Indels
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                                                                                                                                                                                                                                                              61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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Job time: 106.676 secs
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Sequence 333,

sequence 2, Appl.
Sequence 49, Appl.
Sequence 50, Appl.
Sequence 51, Appl.
Sequence 422, App.
Sequence 423, Appl.
Sequence 423, Appl.
Sequence 425, App.
Sequence 7, Appl.
Sequence 7, Appl.
Sequence 56, App.
Sequence 106, App.

Perfect score: Sequence: Scoring table:

Run on:

Searched:

Database

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1 MARLQTALLVVLVLVLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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                 US-10-341-931-2
US-10-335-394-49
US-10-335-394-63
US-10-335-394-63
US-10-335-394-63
PCT-US02-40891-422
PCT-US02-40891-425
PCT-US02-40891-425
US-09-839-445-3
US-09-839-445-3
US-10-001-221A-7
US-10-001-221A-7
PCT-US02-40891-561
PCT-US02-40891-561
PCT-US02-40891-562
PCT-US02-40891-565
PCT-US02-40891-565
PCT-US02-40891-565
PCT-US02-40891-565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: 41 Human Secreted Proteins
FILE REFERENCE: PS740PCT
CURRENT APPLICATION NUMBER: PCT/US02/35606
CURRENT FILING DATE: 2002-11-06
PRIOR FILING DATE: 2001-11-07
SPRIOR PROMPHER: PATENTING TO SECOND SOFTWARE: PATENTING SOFTWARE: PATENTING SOFTWARE: PATENTING SOFTWARE: PATENTING SOFTWARE: PATEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-405-027-2964
US-10-405-027-3164
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US-10-058-270A-100
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GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TILE OF INVENTION: 41 Human Secreted Proteins
FILE REFERENCE: PS740PCT
CURRENT FPLICATION NUMBER: 2002-11-06
PRIOR APPLICATION NUMBER: 60/331,046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
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Matches 87; Conservative
TYPE: PRT
CORGANISM: Homo sapiens
PCT-US02-35606-109
RESULT 2
PCT-US02-35606-146
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Query Match
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Sequence 549, App
Sequence 638, App
Sequence 639, App
Sequence 641, App
Sequence 641, App
Sequence 2, Appli
Sequence 2, Appli
Sequence 8659, Ap
Sequence 8659, Ap
Sequence 4765, Ap
Sequence 8659, Ap
Sequence 8659, Ap
Sequence 8659, Ap
Sequence 8659, Ap
Sequence 2, Appli
Sequence 2, Appli
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Sequence 2, Appli
                                                                                                                                                                    (without alignments)
748.942 Million cell updates/sec
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                                                                                                                                            July 28, 2003, 04:02:59 ; Search time 32.8235 Seconds
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1 MARLQTALLVVLVLVLAVALQ.....XICADPRVPXXKMILNKLSQ
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| cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep:*
| cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep1:*
| cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4:*
| cgn2_6/ptodata/2/paa/US06_NEW_COMB.pep4:*
| cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep4:*
| cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep4:*
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| cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep6:*
| cgn2_6/ptodata/2/paa/US08_NEW_COMB.pep6:*
| cgn2_6/ptodata/2/paa/US10_NEW_COMB.pep6:*
                   GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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PCT-US02-40891-473
PCT-US02-40891-639
PCT-US02-40891-639
PCT-US02-40891-639
PCT-US02-40891-639
PCT-US02-40891-640
PCT-US02-40891-641
US-10-314-410-2
US-10-445-790-2
US-10-445-790-2
US-10-445-790-2
US-10-445-790-2
US-60-453-135-8659
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                                                                                                                                                                                                                                                                                                                                                                              1232328 seqs, 264332421 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
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Maximum Match 100%
Listing first 45 summaries
                                                                                                       OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length
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9 9

Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli

US-60-466-412-8659 US-10-137-438A-2 US-10-406-494-2

Score

Result ջ US-10-285-572-2

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SOFTWARE: Patentin Ver. 2.0
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Best Local Similarity 93.5
Matches 87; Conservative
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PCT-US02-40891-549
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Pred. No. 2e-50;
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Pred. No. 2e-50;
0; Mismatches
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GENERAL INFORMATION:
APPLICANY: Human Genome Sciences, Inc.
ITILE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF54PCT
CURRENT FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2002-06-10
PRIOR FILING DATE: 2002-07-40
PRIOR PLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-09-18
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR PLILNG DATE: 2002-09-18
PRIOR PLILNG DATE: 2002-10-11
PRIOR PLILNG DATE: 2002-10-11
PRIOR PLILNG DATE: 2002-10-11
PRIOR PLILNG DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/410,246
PRIOR FILING DATE: 2002-10-23
PRIOR FILING DATE: 2002-11-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-11-38
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93.5%;
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Best Local Similarity 93.5%;
Matches 87; Conservative
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 160
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 146
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Best Local Similarity 93.53
Matches 87; Conservative
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PCT-US02-35606-146
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PCT-US02-40891-473
                                                                                          LENGTH: 93
                                                                                                                 TYPE: PRT
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SOFTWARE: Pat
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SOFTWARE: Patentin Ver. 2.0
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Pred. No. 2e-50;
0; Mismatches 6;
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Pred. No. 2e-50;
0; Mismatches
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TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT PEPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-3
PRIOR PELICATION NUMBER: 60/341,811
PRIOR PELICATION NUMBER: 60/341,811
PRIOR PELING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-8
PRIOR FILING DATE: 2002-02-18
PRIOR APPLICATION NUMBER: 60/399,008
PRIOR FILING DATE: 2002-07-24
PRIOR PILING DATE: 2002-07-24
PRIOR PELING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR PELING DATE: 2002-09-18
PRIOR PILING DATE: 2002-09-18
PRIOR PELING DATE: 2002-09-19
PRIOR PILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-1
PRIOR PELING DATE: 2002-10-1
PRIOR PELICATION NUMBER: 60/42,623
PRIOR PELING DATE: 2002-10-3
PRIOR PELING DATE: 2002-10-3
PRIOR PELING DATE: 2002-10-3
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR PILIG DATE: 2002-10-23
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-01-28
Remaining Prior Application data removed - 5
NUMBER OF SEQ ID NOS: 2222
SEQ ID NO 638
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; GENERAL INFORMATION:
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Best Local Similarity 93.5%;
Matches 87; Conservative
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Best Local Similarity 93.5%;
Matches 87; Conservative
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ORGANISM: Homo sapiens
PCT-US02-40891-638
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ORGANISM:
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1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSC 60
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Sequence 640, Application PC/TUS0240891

GENERAL INFORMATION:
APPLICANT: Human Genomes Sciences, Inc.
TITLE OF INVEWION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT PAPLICATION NUMBER: PC7/US02/40891

CURRENT PILING DATE: 2002-12-23

PRIOR FILING DATE: 2001-12-21

PRIOR FILING DATE: 2002-02-08

PRIOR FILING DATE: 2002-05-09

PRIOR FILING DATE: 2002-05-09

PRIOR FILING DATE: 2002-09-18

PRIOR FILING DATE: 2002-09-18

PRIOR PELICATION NUMBER: 60/411,355

PRIOR PELICATION NUMBER: 60/411,355

PRIOR PELICATION NUMBER: 60/414,984

PRIOR FILING DATE: 2002-10-11

PRIOR FILING DATE: 2002-10-11

PRIOR PELICATION NUMBER: 60/417,611

PRIOR PELICATION NUMBER: 60/417,611

PRIOR PELICATION NUMBER: 60/420,246

PRIOR FILING DATE: 2002-10-21

PRIOR FILING DATE: 2002-10-23

PRIOR FILING DATE: 2002-10-23

PRIOR FILING DATE: 2002-10-28

PRIOR PRIOR PRIOR APPLICATION NUMBER: 60/423,623

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Pred. No. 2e-50;
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TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-3
PRIOR PAPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR APPLICATION NUMBER: 60/369
PRIOR FILING DATE: 2002-02-8
PRIOR FILING DATE: 2002-02-8
PRIOR FILING DATE: 2002-05-10
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93.5%;
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Best Local Similarity 93.59
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PCT-US02-40891-640
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DB 12; Length 93;
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97.2%; Score 445; DB 12
93.5%; Pred. No. 2e-50;
iive 0; Mismatches
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GEMERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Human Secreted Proteins
FILE REFERENCE: PS806PH
CURRENT PAPLICATION NUMBER: US/10/405,027
CURRENT FILING DATE: 2003-04-07
PRIOR APPLICATION NUMBER: 60/369,608
PRIOR FILING DATE: 2002-04-04
PRIOR FILING DATE: 2002-04-04
PRIOR FILING DATE: 2002-04-30
NUMBER: PAROR FILING DATE: 2002-04-30
SOFTWARE: PALORITING NOW SERIO
SOFTWARE: PALORITING NOS: 5810
SOFTWARE: PALORITING VET. 2.0
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SOFTWARE: Patentin version 3.1
SEQ ID NO L
LENGTH: 93
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Best Local Similarity 93.54
Matches 87; Conservative
                             Best_Local Similarity 93.5
Matches 87; Conservative
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; ORGANISM: Homo sapiens
US-10-405-027-5105
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     Query Match
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APPLICANT: HOLTAMAILON:
APPLICANT: HOLTAMAILON:
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Ban, Yang
TITLE OF INVENTION: VESS
TITLE OF INVENTION: USES
TITLE OF INVENTION: USES
FILE REFERENCE: 07334-324001
CURRENT FILING DATE: 2002-12-06
PRIOR APPLICATION NUMBER: US/09/811,088
PRIOR APPLICATION NUMBER: US 09/712,726
PRIOR PELING DATE: 2000-11-14
PRIOR PPLICATION NUMBER: US 09/712,726
PRIOR PELING DATE: 1997-03-12
PRIOR PPLICATION NUMBER: US 08/843,652
PRIOR PPLICATION NUMBER: US 08/843,651
PRIOR PLING DATE: 1997-04-16
PRIOR PLING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
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SOFTWARE: Patentin Ver. 2.0
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Pred. No. 2e-50;
0; Mismatches 6; Indels
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SOFTWARE: FastSEQ for Windows Version 4.0
                 PRIOR FILING DATE: 2002-07-24
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR PELING DATE: 2002-10-18
PRIOR FILING DATE: 2002-10-02
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR APPLICATION NUMBER: 60/42,246
PRIOR FILING DATE: 2002-10-23
PRIOR FILING DATE: 2002-11-05
  APPLICATION NUMBER: 60/398,008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/10314410 GENERAL INFORMATION:
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Best Local Similarity 93.5%;
Matches 87; Conservative
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PCT-USO2-40891-641
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US-10-314-410-2
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LENGTH: 93
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APPLICANT: Garzino, Alfedo
TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
FILE REFERENCE: 4115-109 CIP DIV
CURRENT APPLICATION NUMBER: US/10/445,790
CURRENT FILING DATE: 2003-05-27
PRIOR APPLICATION NUMBER: PCT/US98/26291
PRIOR FILING DATE: 1998-12-11992
PRIOR FILING DATE: 2000-12-06
PRIOR FILING DATE: 2000-03-06
PRIOR FILING DATE: 2000-03-06
PRIOR APPLICATION NUMBER: US 60/186,416
PRIOR FILING DATE: 2000-03-02
PRIOR FILING DATE: 2000-03-02
PRIOR FILING DATE: 1997-12-11
                                                                                                1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
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APPLICANT: BEGOVICH, Ann TITLE OF INVENTIONS GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTIONS GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTIONS RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF FILE REPERBNCE: CLOOM 68 CURRENT APPLICATION NUMBER: US/60/465,241 CURRENT FILING DATE: 2003-04-23 NUMBER OF SEQ ID NOS: 258418 SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                          METHODS OF DETECTION AND USES THEREOF
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Pred. No. 2e-50;
0; Mismatches 6; Indels
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APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Am
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: GENETIC POLYMORPHISMS OF DETE
FILE REFERENCE: CL001455
FURRENT PRILIG DATE: 2003-03-18
NUMBER OF SEQ ID NOS: 50986
SEGTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4765
LENGTH: 93
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Pred. No. 2e-50;
0; Mismatches 6;
    61 PRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 93
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                                                                                              US-60-455-444-4765; Sequence 4765, Application US/60455444; GENERAL INFORMATION:
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1 Similarity 93.5%;
87; Conservative
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Best Local Similarity 93.5'
Matches 87; Conservative
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US-60-455-444-4765
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Best Local Similarity
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GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: CARGILL, Michele
APPLICANT: CARGILL, Michele
APPLICANT: IAKOUBOVA, Olga
TITLE OF INVENTION: WYCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLO01456
CURRENT APPLICATION NUMBER: US/60/453,135
CURRENT APPLICATION NUMBER: US/60/453,135
SOFTWARE: FastSEQ for Windows Version 4.0
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TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
FILE REPERENCE: CLO01457
CURRENT APPLICATION NUMBER: US/60/453,050
CURRENT FILING DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8659
LENGTH: 93
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Score 445; DB 12; Length 93;
Pred. No. 2e-50;
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93.5%; Pred. No. 2e-50;
Live 0; Mismatches
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0; Mismatches
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APPLICANT: CARGILL, Michele
97.28;
                  Local Similarity 93.5
les 87; Conservative
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Best Local Similarity 93.5
Matches 87; Conservative
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Matches 87; Conservative
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US-60-453-135-8659
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US-60-453-050-8659
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US-60-453-050-8659
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LENGTH: 93
  Query Match
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Matches
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

July 28, 2003, 04:01:18 ; Search time 9.18277 Seconds (without alignments) 973.617 Million cell updates/sec Run on:

US-09-509-165A-25

458 1 MARLQTALLUVLVLLAVALQ......XICADPRVPXXKMILNKLSQ Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283224 seqs, 96134422 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR\_73:\* Database :

1: pir1:\*
'2: pir2:\*
3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	macrophage inflamm		monocyte chemoattr	monocyte chemoattr	macrophage inflamm	macrophage inflamm	LD78-beta protein	o.	monocyte chemotact	monocyte chemotact	immune activation	monocyte chemoattr	monocyte chemoattr	monocyte chemoattr	eotaxin precursor	monocyte chemoattr	monocyte chemoattr	immediate-early se	gene C10 protein -		eotaxin precursor	eotaxin precursor	monocyte chemoattr	PDGF-inducible JE	lymphotactin precu	monocyte adherence	neutrophil-activat	lymphocyte and mon	platelet factor 4
SUMMARIES	152322	A32393	A28815	A46539	A31767	A30574	B35673	C30552	A54678	JC5295	146730	148147	JC2417	A60299	JC4912	A39296	JC2336	S07723	I49555	146857	I48099	JC2478	JC2136	A30209	ETHUL	C60407	A55010	JE0177	A26774
DB	7	~	-	Н	Н	~	~	~	N	~	~	~	~	~	7	Н	~	-	~	~	~	~	~	П	-	~	~	7	~
Length	92	92	91	91	92	92	93	92	109	66	92	120	66	66	6	66	66	148	116	125	96	96	66.	148	114	20	114	120	105
% Query Match	28.4	27.0	26.5	25.5	25.2	24.9	24.9	23.3	22.6	22.5	21.5	21.4	20.5	19.9	19.3	19.3	19.3		•	18.2	•	17.2	17.2	16.6	16.5	16.2	16.2	16.2	15.5
Score	130	123.5	121.5	117	115.5	114	114	106.5	103.5	103	98.5	86	92.5	91	88.5	88.5	88.5	87	æ	83.5	80	79	79	92	75.5		74	74	71
Result No.		7	e	4	S	9	7	80	თ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	29

macrophage inflammatory protein-1-alpha precursor - mouse
N;Alternate names: heparin-binding chemotaxis protein; L2G25B protein; SCI/MIP-la; SI
C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence\_revision 17-Jul-1992 #text\_change 16-Jul-1999
C;Accession: S11685; A32393; S04533; A53885; A30552; PS0303; A27596; I56104
R;Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.
Nucleic Acids Ros. 18, 5561, 1990
A;Tille: Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammat
A;Reference number: S11685; MUID:91016858; PMID:2216738

63 PGVVLLTFRDKXICADPR 80 |||:||:|||::||||:: PGVIFLTKRNRQICADPK 77

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A;Molecule type: DNA A;Residues: 1-92 <GRO. A;Cross-references: BMBL:X53372; NID:954062; PIDN:CAA37452.1; PID:9297531 A;Note: the authors' translation of the nucleotide sequence differs at several positi R;Kwon, B.S.; Weissman, S.M.

R; Kwon, B.S.; Weissman, S.M.
Proc. Natl. Acad. Sci. U.S.A. 86, 1963-1967, 1989
A; Title: CDNA sequence of two inducible T-cell genes.
A; Reference number: A32393; MUID:89184547; PMID:2784565
A; Accession: A32393
A; Molecule type: mRNA

•	68 68 68 55 5 5 5 5 5 5 5 5 5 5 5 5 5 5		. 100 96 119 658 87 87 119 113 394 100 203 364 654	00100000000000	JH0200 A37236 A57225 A57225 S242801 A48093 A48093 A24236 JC7800 S26198 S0523 T52466 S46198 D72323 AEWT2 B64766 T34960	macrophage inflamm I-309 protein prec CC. chemokine Li probable anion exc platelet basic pro monocytic cytckine Tcell activation TCA3 protein — mou neutrophil activat agglutinin isolect ferrichrome sidero cytokine-induced n conserved hypothet aggluthin isolect yaiw protein - Esc cell division prot
necrophage inflammatory protein-lalpha C; Species: Rattus norvegicus (Norway ra C; Date: 29-May-1998 #sequence_revision	ge infl s: Ratt 29-May-	ammator us norv 1998 #s	ry prote regicus sequence	in-	ne2011 1 1152322 1152322 C:Species: Rattus norvegicus (Norway rat) C:Date: 29-May-1998 #sequence_revision 29-May-1998	y-1998 #text_change 16-Jul-1999
C;Accession: 152322 R;Shi, M.M.; Godleski, Biochem. Blophys. Res. A;Title: Molecular clor A;Reference unuber: 153	ion: 15 I.M.; Go Biophy Molecu nce num	2322 dleski, s. Res. lar clc ber: I5	J.J.; . Commur oning ar 52322; N	Pat 1. 2 1d F	C:Accession: 15.33.2 R:Shi, M.M.; Godleski, J.J.; Paulauskis, J.D. Blochem. Biophys. Res. Commun. 211, 289-295, 1995 A;Title: Molecular cloning and posttranscriptional regu. A;Reference number: 15.23.2; MUID:95.298037; PMID:7779098	.1995 tional regulation of macrophage inflammat MID:7779098
A.Status: preliminary; A.Molecule type: mRNA A.Residues: 1-92 <res> A.Cross-references: EME</res>	prelicible type les: 1-9 references: 1-9	minary; minary; mrna 2 <res; ces; Ev</res; 	pp n	ate 14;	A.Status: preliminary; translated from GB/EMBL/DDBJ A.Molecule type: mRNA A.Residues: 1-92 <res> A.Tross references: EMBL:U22414; NID:9790632; PIDN:</res>	BL/DDBJ ; PIDN:AAA80608.1; PID:9790633
Query Match Best Local Matches 2	Match Ocal Sin	Similarity Conser	28.4%; larity 35.9%; Conservative	28.4%; 35.9%; 1ve	Score 130; DB 2; Pred. No. 1.2e-08; 15; Mismatches 33	DB 2; Length 92; 1.2e-08; hes 33; Indels 2; Gaps 2;
Qy	e c	LQTALLN:  -       VSTAALA	VVLVLLAN   :  VLLCTMP	ALC	ATEAGPYGANMEI :     : TEVFSAPYGAD-TI	RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPR 62 ::

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Accession: A28815

N; Alternate names: small inducible cytokine A5; T-cell specific cytokine RANTES
C; Species: Homo saplens (man)
C; Species: Homo saplens (man)
C; Species: Homo saplens (man)
C; Date: 30-Jun-1989 #sequence_revision 16-Aug-1996 #text_change 29-May-1998
C; Accession: A28815
R; Schall, T.J; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M;
J; Immunol. 141, 1018-1025, 1988
R; Schall, T.J; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M;
A; Reference number: A28815; MUD: 88285659; PMID: 2456327
A; Accession: A28815
A; Accession: A28815
A; Accession: A28815
A; Molecule type: mRNA
A; Residues: 1-91 <SCH>A;
A; Cross-references: GB: M21121
C; Comment: The acronym RANTES reflects the description "Regulated upon Activation, E0; Genetics: GB: SCTAS; D178136E
A; Cross-references: GDB: 120749; OMIM: 187011
A; Map position: 17411.2-17412
C; Superfamily: macrophage inflammatory protein
C; Superfamily: macrophage inflammatory protein
C; Superfamily: macrophage inflammatory protein
C; Superfamily: macrophage inflammatory accessing the Asido Sicher Status predicted <AIG>F; 24-91/Product: T-cell protein RANTES #status predicted <AMT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N.Alternate names: MuRantes
C; Species: Mus musculus (house mouse)
C; Accession: 148875; A46539; 148654; 156970
A; Title: Cloning, genomic organization, and chromosomal localization of the Scya5 g-n A; Accession: 148875
A; Accession: 148875
A; Accession: 148875
A; Accession: 148875
A; Accession: 15875; MulD:94132613; PMID:7507961
A; Accession: 15875; MulD:94132613; PMID:7507961
A; Accession: 15875
A; Accession: 168875
A; References: EMBL:U02298; NID:9460090; PIDN:AAA18302.1; PID:9460091
B; Schall: T.J.; Simpson, N.J.; Mak, J.Y.
Eur. J: Immunol. 22, 1477-1481, 1993
A; Title: Molecular cloning and expression of the murine RANTES cytokine: structural_a, Accession: A, Accession: A, A6530
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A. Residues: 1-18, A', 20-91 <SCH>
A. Construction of Berson of State 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SAAALAVILIATALCAPASASPYSS -- DTTPCCFAYIARPLPRAHIKEYFYTSGKCSNPA 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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29.9%; Pred. No. 1.3e-07.
tive 20; Mismatches 38
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Best Local Similarity 29.9%
Matches 26; Conservative
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S. Fibrown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A;Title: A family of small inducible proteins secreted by leukocytes are members of a new of various activation processes.
A;Reference number: A30552; MUID:89093958; PMID:2521353
A;Accession: A30552
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A; Residues: 24-33, XX', 36-54 <SHE>
X; Wolpe, S.D.; Davatelis, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.; Moldaw
J. Exp. Mol. 167, 570-581, 1988
A; Title: Macrophages secrete a novel heparin-binding protein with inflammatory and neutr
A; Reference number: A27596; MUID:88154745; PMID:3279154
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A; Residues: 24-33, XX,36-42 < MOL>
A; Residues: 24-33, XX,36-42 < MOL>
A; Note: 26.Met, 30-Pro. and 39-Thr were also found
R; Widdner, U.; Yang, Z.; Van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A.
J. Immunol. 146, 4031-4040, 1991
A; Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and conserv
A; Reference number: 156104; MUID:91237116; PMID:2033269
A; Accession: 156104
                                                                                                                A, Title: Cloning and characterization of a cDNA for murine macrophage inflammatory prote A, Reference number: S04533; MUID:88258380; PMID:3290382
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A; Residues: 1-21, L', 23-61, 'A', 63-92 <BRO>
A; Residues: 1-21, L', 23-61, 'A', 63-92 <BRO>
A; Cross-references: GB:M2447; NID:9533240; PIDN:AAA40146.1; PID:9533241
R; Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.; Mas
R; Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.; Mas
A; Title: Resolution of the two components of macrophage inflammatory protein 1, and clor
A; Reference number: JL0088; MUID:89067830; PMID:3058856
                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1.48, 'E', 50-90,'I',92 <DA2>
A; Residues: 1.48,'E',50-90,'I',92 <DA2>
A; Cross-references: EMBL:X12531
A; Note: the authors translated the codon GAG for residue 49 as Asp and ATT for residue
A; Note: the sequence has been corrected in reference A53885
A; Note: the sequence has been corrected in reference A53885
A; Note: the sequence has been corrected in reference A53885
A; Note: the Sequence has been corrected in reference A53885
A; Reference number: A53885
A;Cross-references: GB:J04491; NID:g201524; PIDN:AAA40304.1; PID:g201525
R;Davatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos, C.;
J. Exp. Med. 167, 1939-1944, 1988
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C.Keywords: heparin binding
F:1.-23.Domain: signal sequence #status predicted <SIG>
F:24-92/Product: macrophage inflammatory protein #status experimental <WAT>
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;; Pred: No. 7.7e-08;
14; Mismatches 29;
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Best Local Similarity 38.7%;
Matches 29; Conservative 1
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A; Residues: 1-92 <DAV>
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A;Residues: 1-92 <RE
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A;Status: translation not shown; translated from GB/EMBL/DDBJA;Molecule type: DNA A;Residues: 1-91 <SHI>

: || |:: ||||: 63 IFLTKRNRQICADSK 77

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A; Molecule type: mRNA
A; Residues: 1-39, RBASS', 46-92 <BRO>
A; Residues: 1-39, RBASS', 46-92 <BRO>
A; Cross-references: GB: M23502; NID: 9533212; FIDN: AAA36656.1; PID: 9533213
B; Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
Submitted to the Brookhaven Protein Data Bank, January 1994
A; Reference number: A52206; PBB: 11HUM
A; Contents: annotation; conformation and disulfide bond assignments by (1)H-NWR, resi
C; Comment: This protein is secreted by activated lymphocytes and monocytes. It is bou
    A;Cross-references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
R;21pfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
1 imminol. 142, 1882-1590, 1989
A;Title: Mitogenic activation of human T cells induces two closely related genes whiz A;Reference number: A30574; MUID:89140347; PMID:2521882
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N;Alternate names: LD78-alpha protein precursor; lymphocyte tumor promoter-induced pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 7-55, 1':57-79, 'T', 81-92 <MIL>
A; Cross-references: GB:M57503; NID:g339726; PIDN:AAA36752.1; PID:g339727
A; Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A; Title: A family of small inducible proteins secreted by leukocytes are members of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Superfamily: macrophage inflammatory protein
C;Keywords: chemotaxis; cytokine; inflammation
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
F;34-58,35-74/Disulfide bonds: #status experimental
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C;Species: Homo sapiens (man)
C;Date: 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change 21-Jul-2000
C;Accession: A35673; A30574; A30412; A24198; A30908
R;Nakao, M.; Nomiyama, H.; Shimada, K.
Rinakao, M.; Nomiyama, H.; Shimada, K.
A;Itle: Structures of human genes coding for cytokine LD78 and their expression.
A;Reference number: A35673; MUID:90287155; PMID:1694014
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                                                                                                                                                                                                                                                                      A; Molecule type: mRNA.
A; Molecule type: mRNA.
A; Residues: 1-19, 'L',21-92 <ZIP>
A; Cross.references: GB-M25316; NID:g602454; PIDN:AAA57256.1; PID:g602455
A; Cross.references: GB-M25316; N.D.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. 143, 2907-2916, 1989
A; Title: A novel polypeptide secreted by activated human T lymphocytes.
A; Reference number: A45817; MUID:90038522; PMID:2809212
A; Accession: B45817
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A;Residues: 1-92 <NAK>
A;Cross-references: GB:D90144; NID:g219905; PIDN:BAA14172.1; PID:g219906
R;Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
J. Immunol. 142, 1582-1590, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  s of various activation processes.
A;Reference number: A30552; MUID:89093958; PMID:2521353
A;Accession: D30552
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Best Local Similarity 33.8%; Pred. No. 7.3e-07;
Matches 26; Conservative 13; Mismatches 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: GDB:127451; OMIM:153335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 PGVVLLTFRDKXICADP 79
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A; Introns: 26/1; 64/2
                                                                                                                                                                                                                                       A; Accession: B30574
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Genetics:
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Macrophage inflammatory protein 1-beta precursor [validated] - human
N:Alternate names: cytokine Mc21; G-26 protein; H400 homolog; lymphocyte activation gene
protein 2 (Act-2); T-cell activation protein gamma
C:Species: Homo saplens (Man)
C:Date: 07-Jun-1909 Sequence_revision 29-May-1998 #text_change 15-Sep-2000
C:Accession: JH0319; A40978; A31767; A37411; B30574; B45817; D30552
R:Balxaras E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pequig
A:Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
A:Reference number: JH0319; MUID:91061800; PMID:2247088
A:Accession: JH0319
A:Residues: 1-92 CABI.
A:Repolitano, M.; Modi. W.S.; Cevario, S.J.; Gnarra, J.R.; Seuanez, H.N.; Leonard, W.J.
A:Residues: 1-14 (S., 16-69, G', 71-92 CARAP)
A:Residues: 1-14 (S., 16-69, G', 71-92 CARAP)
A:Rocession: A40978; MUID:91373378; PMID:1894635
A:Rocession: A40978
A:Residues: 1-14 (S., 16-69, G', 71-92 CARAP)
A:Reference number: A40978; MUID:91373378; PMID:1894635
A:Reference number: A31767; MUID:91373378; PMID:2462251
A:Reference number: A31767; MUID:99071764; PMID:2462251
A:Reference number: A31767; MUID:99071764; PMID:2462251
A:Reference number: A31767; MUID:99071764; PMID:2462251
A;Cross-references: EMBL:X70675; NID:g475205; PIDN:CAA50011.1; PID:g475206
R;Nellson, E.G.; Krensky, A.
Kidney Int. 41, 220-225, 1992
A;Title: Isolation and characterization of cDNA from renal tubular epithelium encoding m.
A;Reference number: 156970; MUID:92277990; PMID:1375672
A;Accession: 156970; MUID:92277990; PMID:1375672
A;Accession: 156970; MUID:92277990; PMID:1375672
A;Accession: 156970; MUID:9207649; PMID:1375672
A;Residues: 1-40, 'E', 42-91 < NEI-
A;Residues: 1-40, 'E', 42-91 < NEI-
A;Cross-references: GB:M77747; NID:g200649; PIDN:AA440029.1; PID:g200650
C;Comment: This chemoattractant for monocytes but not neutrophils is an immediate-early
C;Genetics: 26/1; 63/2
A;Introns: 26/1; 63/2
C;Superfamily: macrophage inflammatory protein
C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation
C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation
F;1-23/Domain: slagnal sequence #status predicted <AAT>
F;24-91/Product: monocyte chemoattractant cytokine RANTES #status predicted <AAT>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: mRNA
A; Residues: 1-92 <LIP>
A; Cross-references: GB:J04130; NID:g178017; PIDN:AAA51576.1; PID:g178018
R; Chang, H.C.; Reinherz, E.L.
Eur. J. Immunol. 19, 1045-1051, 1989
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A; Residues: 1-92 <CHA>
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Best Local S
Matches 25
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Length Indels δ

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N'Alternate names: H400, 515 gamma; T-cell activation protein gamma
C;Species: Mus musculus (house mouse)
C;Date: 28-Aug-1989 sequence_revision 28-Aug-1989 #text_change 16-Jul-1999
C;Accession: C30552; Ju0088; Ps0304; S22042
R;Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A;Title: A family of small inducible proteins secreted by leukocytes are members of
                                                                                                                                                                                                   PID:9296666
"activation specific"
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A; Residues: 1-92 <BRO>
A; Cross-references: GB:M23503; NID:9533244; PIDN:AAA40148.1; PID:9533245
A; Cross-references: GB:M23503; NID:9533244; PIDN:AAA40148.1; PID:9533245
B; Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.; Exp. Med. 168, 2251-2259, 1988
A; Title: Resolution of the two components of macrophage inflammatory protein 1, and A; Reference number. JL0088; MUID:89067830; PMID:3058856
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C: Keywords: glycoprotein
E;1-23/Domain: signal sequence #status predicted <SIG>
F;24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
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A; Molecule type: protein
A; Residues: 24-33, XX, 36, X, 38 <SH2>
B; Daubersles, P.; Lepretre, F.; Bailleul, B.; Grove, M.; Pragnell, I.; Plumb, M. submitted to the EMBL Data Library, October 1991
A; Description: Sequence of the murine macrophage inflammatory protein lb gene.
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                                                                                                                                                                              A;Cross references: EMBL.X52149; NID:g34750; PIDN:CAA36397.1; Comment: This protein is a member of a "small inducible" or C;Comment: This protein is a member of a "small inducible" or A;Gene: GDB:SCYA4
A;Gene: GDB:SCYA4
A;Gene: GDB:SCYA4
A;Arons: 26/71; 64/7
C;Superfamily: macrophage inflammatory protein
C;Superfamily: macrophage inflammatory protein
F;1-22,Domain: signal sequence #status predicted <SIG>F;23-93,Product: LD78-beta protein #status predicted <MAT>
                     Reference number: S10157; MUID:90287702; PMID:1972563
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A; Reference number: A30552; MUID:89093958; PMID:2521353
A; Accession: C30552
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A; Accession: S22042
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                                                                            A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-93 <IRV>
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A; Residues: 1-92 <DAU>
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                                                          A Accession: A30574
A Molecule type: mRNA
A Molecule type: mRNA
A Residues: 1-92 <ZIP>
A Cross-references: GB:M25315; NID:g602452; PIDN:AAA57255.1; PID:g602453
B Lous S: Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol 9, 589-602, 1990
A; Title: Three human homologs of a murine gene encoding an inhibitor of stem cell prolif
A; Reference number: A30412; MUID:91103879; PMID:2271120
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R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell prolif
A;Reference number: A30412; MUID:91103879; PMID:2271120
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R;Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Sieber Nucleic Acids Res. 18, 3261-3270, 1990
A;Title: Two inflammatory mediator cytokine genes are closely linked and variably amplif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             homolog GOS19-2; small inducible cytq
Title: Mitogenic activation of human T cells induces two closely related genes which Reference number: A30574; MUID:89140347; PMID:2521882
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Map position: 17q11-17q21

S. Superfamily: macrophage inflammatory protein
E;1-20/Domain: signal sequence #status predicted <SIG>
F;21-92/Product: macrophage inflammatory protein 1-alpha #status predicted <MAT>
F;33-57,34-73/Disulfide bonds: #status predicted
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A;Title: Structures of human genes coding for cytokine LD78 and their expression.
A;Reference number: A35673; MUID:90287155; PMID:1694014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QVSTAALAVL-LCTMAL----CNQFSASLAADIPTACCFSYTSRQIPQNFIADYFETSSQ 56
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C;Date: 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 20-Jun-2000
C;Accession: B35673; B30412; S10157; B30908
R;Nakao, M.; Nomlyama, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3658, 1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Cross-references: GB: X03754; NID: 934298; PIDN: CAA27388.1; PID: 9758089
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 92;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 24:9%; Score 114; DB 2; Local Similarity 32:5%; Pred. No. 1.1e-06; Les 26; Conservative 15; Mismatches 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LD78-beta protein precursor – human
N;Alternate names: macrophage inflammatory protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Cross-references: GDB:120368; OMIM:182283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60 CPRPGVVLLTFRDKXICADP 79
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57 CSKPGVIFLTKRSRQVCADP 76
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A; Residues: 1-92 <BLU>
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A; Molecule type: DNA
A; Residues: 1-93 <NAK>
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C; Accession: 146730
R; Mori, S.; Goto, K.; Goto, F.; Mutakami, K.; Ohkawara, S.; Yoshinaga, M.
Int. Immunol. 6, 149-156, 1994
A; Tille: Dynamic changes in mRNA expression of neutrophils during the course of acute A; Reference number: 146730; MUID:94198229; PMID:8148323
A; Accession: 146730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A) Experimental source: bone marrow C; Comment: This protein belongs to the beta-chemokine family which is one of the majouts and in tumor biology, and contribute to the trafficking and recuitment of the reserves
                                                                                                                                                                  R; Van Coillie, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van Biochem. Biochem. 231, 726-730, 1997
A; Title: Human monocyte chemotactic protein-2: cDNA cloning and regulated expression A; Reference number: JC5295; MUID:97224420; PMID:9070881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J. Immunol. 150, 5025-5032, 1993
A; Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ä
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 VSAALLCLLLMAATFSPQGLAQPDSVSIPITCCFNVINRKIPIQRLESYTRITNIQCPKE 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPR 62
                                      C:Species: Homo sapiens (man)
C:Date: 02-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000
C;Accession: JC5295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immune activation gene 2 - rabbit
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 14-Feb_1997 #sequence_revision 14-Feb-1997 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         monocyte chemoattractant protein-1 - guinea pig
C;Species: Cavia porcellus (guinea pig)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:Y10802; NID:g1924937; PIDN:CAA71760.1; PID:g1924938
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C;Superfamily: macrophage inflammatory protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Superfamily: macrophage inflammatory protein
C;24)Domain: signal sequence #status predicted <SIG>
F;24-99/Product: monocyte chemotactic protein-2 #status predicted <MAT>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 22.5%; Score 103; DB 2; Length 99; Best Local Similarity 31.2%; Pred. No. 2.6e-05; Matches 24; Conservative 13; Mismatches 34; Indels
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A;Molecule type: mRNA
A;Residues: 1-92 <MOR>
        monocyte chemotactic protein; 2 precursor - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 GVVLLTFRDKXICADPR 80
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63 AVIFKTQRGKEVCADPK 79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 PGVVLLTFRDKXICADP
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Best Local Similarity
Matches 22; Conserv
                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: mRNA A; Residues: 1-99 <VAN>
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N;Alternate names: monocyte chemoattractant protein MCP-3
C;Species: Homo sapiens (man)
C;Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 16-Jul-1999
C;Accession: A54678; JC1478; S32222
C;Accession: A54678; JC1478; S32222
Genomics 21, 403-408, 1994
A;Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the A;Reference number: A54678; MUID:94375065; PMID:7916328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-109 <COP2.
A; Residues: 1-109 <COP2.
A; Cross-references: GB:X72308; GB:S57464; NID:g3928270; PIDN:CAAS1055.1; PID:g313708
A; Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux,
Bibmitted to the EMBL Data Library, March 1993
A; Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoattrac
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A;Residues: 1-109 <MIN>
A;Cross-references: EMBL:X71087; NID:g288396; PIDN:CAA50405.1; PID:g288397
C;Comment: This protein induces proteinase secretion and chemotaxis by macrophages and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TALLVVLVLLLAVALQATE-AGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDS-CPRP
                                                                                                                                                                           Gaps
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C; Keywords: cytokine; glycoprotein; inflammation
F:1-33/Domain: signal sequence #status predicted
F:34-109/Product: monocyte chemotactic protein 3 #status predicted
F:39/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;76/Binding site: carbohydrate (Asn) (covalent) #status predicted
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                                                                                 ; Score 106.5; DB 2; Length
; Pred. No. 9.1e-06;
13; Mismatches 39; Indels
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A;Cross-references: GDB:138473; OMIM:158106
A;Map position: 17q11-17q12
A;Introns: 36/1; 75/2
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PAVVFLTKRGRQICANPSEP 80
                                                                                                                                                                                                                                                                                                                                                                                                                  63 PGVVLLTFRDKXICADPRVP 82
                                                                                 23.3%;
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                                                                             Query Match 23.39
Best Local Similarity 33.89
Matches 27; Conservative
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Best Local Simi
Matches 27;
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JC5295
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A: Weterence number: Abu299; Mull: 90210082; Philis 218254/
A: Accession: A60299
A: Status: not compared with conceptual translation
A: Molecule type: mRNA
A: Residues: 1-99 < GOTO:
B: Nomica H: Notake, M: Oyamada, Y:; Fukui, T.; Yamada, M.; Larsen, S: R: Futuali, Y:; Nomica H: Nomica 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A)Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
R;Bottazzi, B.; Colotta, F.; Sica, A.; Nobill, N.; Mantovanl, A.
Int. J. Cancer 45, 795-797, 1990
A;Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotace
                                                                                                                                                                                                                                                                                                                                     A, Title: Human monocyte chemoattractant protein-1 (MCP-1), Full-length cDNA cloning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A.Cross-references: GB:S69738; NID:9545464; PIDN:AAB29926.1; PID:9545465
R;Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
Chinese J. Microbiol. Immunol. 14, 29-32, 1994
A;Title: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1
A;Reference number: JC1096
A;Accession: JC1096
A;Accession: JC1096
A;Molecule type: mRNA
                                                                                                                                                                                                                    A; Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; R; Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J. FEBS Lett. 244, 487-493, 1989
                                            of the JE gene encodes a monocyte secretory protein. MUID:90097880; PMID:2513477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-99 < xOS>
A;Coss-references: G8:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514
A;Experimental source: g1:And cell line U-105MG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Yoshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. 305, 47-56, 1991
A;Title: Human monocyte chemoattractant protein-1 (MCP-1).
A;Reference number: I51841; MUID:92095166; PMID:1661560
                                                                                                                                                                                                                                                                                                                                                                                                         A. Reference number: S03339; MUID:89153605; PMID:2465924
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A,Status: preliminary; translated from GB/EMBL/DDBJ
A,Molecule type: mRNA
A,Residues: 1-99 <YO2>
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A, Molecule type: mRNA
A, Residues: 1-99 <LIY>
                                    Title: The human homolog c
Reference number: A33476;
                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-99 <ROL>
                                                                                                                A; Accession: A33476
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Monocyte chemoattractant protein-2 precursor - pig

C; Species: Sus scrofa domestica (domestic pig)

C; Date: 34-Reb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999

C; Accession: JC2417

R; Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.

B; Hosang, R.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.

A; Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analys

A; Reference number: JC2417; MuID:95091716; PMID:7999015

A; Accession: JC2417

A; Molecule type: mRNA

A; Residues: 1-99 (ADS)

A; Cross references: GB:248480; NID:9683718; PIDN:CAA88371.1; PID:9683719

A; Residues: 1-99 (ADS)

A; Experimental source: corpus luteum

C; Superfamily: macrophage inflammatory protein

C; Superfamily: macrophage inflammatory protein

F; 1-23/Domain: signal sequence #status predicted <MAT>

F; 24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>
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N.Alternate names: GDGF-1; glioma-derived monocyte chemotactic factor 1; MCAF; MCP-1;
N.Sternate names: GDGF-1; glioma-derived monocyte chemotactic factor 2 (GDCF-2)
C.Species: Homo sapiens (man)
C.Species: No. 1999
R.Shy, Y.J.; Li, Y.S.; Kolattukudy, P.E.
Blochem Biophys. Res. Commun. 169, 346-351, 1990
A.Title: Structure of human monocyte chemotactic protein gene and its regulation by TP
A.Reference number: A35474, MUID: 90290466; PMID: 2357211
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 LQTALLVVLVLLAVALQATE--AGPYGANMEDSV-----CCRDYVRYRLPLXVVXHFX-W 55
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                                                                                                                                                                                A; Cross-references: GB:L04985; NID:g349820; PIDN:AAA37047.1; PID:g349821
C;Genetics:
A;Gene: MCP-1
C:Superfamily: macrophage,inflammatory protein
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A; Residues: 1-99 <SHY>
A; Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124
R; Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. 9, 4687-4695, 1989
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                                                                                                                                                                                                                                                                                                                                                                                                     Length 120;
                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 21.4%; Score 98; DB 2; Length 120
Best Local Similarity 31.5%; Pred. No. 0.00013;
Matches 28; Conservative 15; Mismatches 42; Indels
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A; Accession: 148147
                                                                        A)Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-120 <RES>
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Best Local Similarity
Matches 29; Conserv
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A Map position: 17q11.2-17q12

C; Superfamily: macrophage inflammatory protein

C; Superfamily: macrophage inflammation; pyroglutamic acid

C; Keywords: cytokine; glycoprotein; inflammation; pyroglutamic acid

F; 1-23/Domain: signal sequence #status predicted <SIG>

F; 24-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>

F; 29-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MA

F; 24/Wodified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experiment

F; 37/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C; Species: Homo sapiens (man)
C; Date: 01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change 20-Jun-2000
C; Accession: JC4912
C; Accession: JC4912
R; Bartels, J; Schlueter, C; Richter, E.; Noso, N.; Kulke, R.; Christophers, E.; Schroe Biochem. Biophys. Res. Commun. 225, 1045-1051, 1996
A; Title: Human dermal fibroblasts express eotaxin: Molecular cloning, mRNA expression, a A; Reference number: JC4912; MUID:96374440; PMID:8780731
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A:Molecule type: mRNA
A:Residues: 1-97 CaRA
A:Residues: 1-97 CaRA
A:Residues: 1-97 CaRA
A:Residues: 1-97 CaRA
A:Experimental source: dermal fibroblast
C:Comment: This protein has eosinophil specific chemotatic activity.
C:Superfamily: macrophage inflammatory protein
C:Reywords: fibroblast
F:1-18/Domain: signal sequence #status predicted <SIG>
F:19-97/Product: eotaxin #status predicted <MAT>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match , 19.9%; Score 91; DB 2; Length 99; Best Local Similarity 26.2%; Pred. No. 0.00076; Matches 22; Conservative 18; Mismatches 32; Indels
                                                                                                                                     Cross-references: GDB:125279; OMIM:158105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               57 SDSCPRPGVVLLTFRDKXICADPR 80
A;Residues: 24-28,'Q',30-99 <<u>YEQ></u>
C;Genetics:
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Search completed: July 28, 2003, 04:15:50 Job time: 10.1828 secs

65 VVLLTFRDKXICADPR 80 | : | | | | | | | | 62 VIFKTKLAKDICADPK 77

g S 3.0 . . 

us-09-509-165a-25.rsp

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OM protein - protein search, using sw model

July 28, 2003, 03:58:03 ; Search time 4.88445 Seconds (without alignments) 789.709 Million cell updates/sec Run on:

Title:
Perfect score:
Sequence:

US-09-509-165A-25 458 1 MARLQTALLVVLVLLAVALQ.....XICADPRVPXXKMILNKLSQ

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

112892 seqs, 41476328 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt\_40:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	000626 homo sapien 088430 mus musculu P5574 h small ind 090826 gallus gall P50229 rattus norv P10855 mus musculu P13501 homo sapien 016627 homo sapien P30882 mus musculu P50231 rattus norv P13236 h small ind P10147 homo sapien P50231 rattus norv 016619 homo sapien P50230 rattus norv 016663 homo sapien 097919 bos taurus 062401 mus musculu 092583 homo sapien 092583 homo sapien P80079 homo sapien P80079 homo sapien P80075 cavia porce P82943 cavia porce P82960 cavia porce P829731 homo sapien P43873 homo sapien
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82	
% Query Match Length	888 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
å Query Match	
Score	445 133.53 131.53 115.53 116.55 1116.55 1117.5
Result No.	100 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Q9myn4 macaca fasc O89093 mus musculu	Q9jkc0 mus musculu P55773 homo sapien	Q9y258 homo sapien P28291 bos taurus	000175 homo sapien P14844 rattus norv	Q9z121 mus musculu Q09141 bos taurus	P27784 mus musculu P28292 oryctolagus
SY02_MACFA SY20_MOUSE	SY24_MOUSE SY23_HUMAN	SY26_HUMAN MCPA_BOVIN	SY24_HUMAN SY02_RAT	SY08_MOUSE SY08_BOVIN	SY02_RABIT
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99	119	9 9 9 9	119 148	97	116 125
19.7	19.4	19.3	19.2 19.0	18.6 18.6	18.6 18.2
90	88 8 6 6 8 8 6	88.5 88.5	88 87	8 8 5 8	83.5
34 35	37	ლ რ რ რ	40 41	4 4 3 2	44 45

## ALIGNMENTS

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MARLQTALLVVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytckine A18 precursor (CCL18) (Macrophage inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated chemokine) (CC chemokine PARC) (Alternative macrophage activation-associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
                                                                                                  Sideras P.; "Activated murine B lymphocytes and dendritic cells produce a novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                  MEDLINE-98353531; PubMed-9687523;
Schaniel C., Pardali E., Sallusto F., Speletas M., Ruedl C.,
Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTENTIAL. SMALL INDUCIBLE CYTOKINE A22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.
BY SIMILARITY.
39859881CDAE07CA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG. Cytokine; Chemotaxis; Signal; Inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64.8%; Score 297; DB 1;
59.8%; Pred. No. 9.6e-29;
ive 17; Mismatches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSSP; 098157; 1CM9.
MGD; MGI:1306779; Scya22.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10302 MW;
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60
76
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nes 55; Conserv
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                      SEQUENCE FROM N.A.
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P55774:
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Matches
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chemokine receptor 4.";
J. Biol. Chem. 273:1764-1768(1998).

-1 FUNCTION: MAY PLAT A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR
T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED
T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENORITIC
CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY
ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR
CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES.
BINDS TO CCR4.
                                                                                                                                                          SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN
MONCYTE-DERIVED DENDRIFIC CELLS, AND THYMUS. ALEO FOUND IN LYMPH
NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED
MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK
STRRESSION IN SMALL INTESTINE.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MARLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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15-JUL-1999 (Rel. 38, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
5mall inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
(Activated B and dendritic cell-derived).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 445; DB 1; Length 93;
Pred. No. 1.9e-46;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
CYTOKINE; Chemotaxis; Signal.
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BY SIMILARITY
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InterPro; IPR001811; Chemokine_ILB.
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93.5%;
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; HGNC:10621; SCXA22.
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4atches 87; Conservative
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088430;
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Gaps

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20; Indels

Length 92;

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DISULFID
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                                                                                              TISSUE-Aorta, and Lung;
MEDLINE-93756836; PubMed-9233607;
Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
Nakagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
Miura R., Opdenakker G., van Damme J., Yoshie O., Nomiyama H.;
"A novel human CC chemokine PARC that is most homologous to
macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for
T lymphocytes, but not for monocytes.";
J. Immunol. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-97275308; PubMed-9129202; Wells T.N.C., Peitsch M.C.; "The chemokine information source: identification and characterization of novel chemokines using the WorldWideWeb and expressed sequence tag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-99168908; PubMed-10049593;
Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
Hughes A.L., Nomiyama H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.; "The percent locus for the AMAC-1 gene contains possible pseudo-exons within the first intron sequence." Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE=98230488; PubMed=9570561;
Rodelja V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerdt S.;
Alternative macrophage activation-associated CC-chemokine-1, a novel
structural homologue of macrophage inflammatory protein-1 alpha with
a Th2-associated expression pattern.";
J. Immunol. 160:1411-1418(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'A dendritic-cell-derived C-C chemokine that preferentially attracts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Genomic organization and biological characterization of the novel human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18."; Genomics 56:296-302(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Dendritic cell;
MEDLINE-2736102: PubMed-9192897;
Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
Neote K., McColl S.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Chemokine PARC gene (SCYA18) generated by fusion of two MIP-lalpha/LD78alpha-like genes."; genomics 55:353-357(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
                           Li H., Ruben S.;
"Macrophage inflammatory protein-3 and -4.";
Patent number US5504003, 02-APR-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A., AND CHARACTERIZATION. MEDLINE-99189237; PubMed-10087196;
                                                                                  SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Leukoc. Biol. 61:545-550(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      naive T cells.";
Nature 387:713-717(1997).
                                                                                                                                                                                                                                                                                                                                                      DISCUSSION OF SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS AND T-CELL ARRAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES DELVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY PERIPHERAL BLOOD MONOCYTE-TO-MACROPHAGE DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
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115-JUN-2002 (Rel. 41, Last sequence update)
115-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
                                                                                                                                                    INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCOCORTICOIDS EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING MONOCYTIC 0937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA). SIMILARIY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30.3%; Score 139; DB 1; Length 89; 38.0%; Pred. No. 7.6e-10; Live 13; Mismatches 30; Indels
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BY SIMILARITY.
C287B94B9C0518E4 CRC64;
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PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AF082212; AAC32287.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Interpro; IPR000827; CC_chemkine_sr
Interpro; IPR001811; Chemokine_IL8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; Y13710; CAA74039.1; -.
EMBL; AB012113; BAA34368.1; -.
EMBL; AF082214; AAC32287.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; AB000221; BAA21670.1; -.
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PKPGVILLTKRGRQICADP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; AF082213; AAC32287.1;
EMBL; AF111198; AAD30390.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytokine; Chemotaxis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSSP; P13236; 1HUM.
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hes 30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9031;
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Q90826; Q910C9;
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MCBI_TaxID-10116;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 KVSVAALAVL-LIAICYQ-TSAAPVGSDPPTS-CCFTYISRQLPFSFVADYYETNSQCPH 58
                                                                                                                                                                                                                                                                                                                                                                       -!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha).
                MEDLINE-95369710; PubMed-7642115;
Petrenko O., Ischenko I., Enrietto P.J.;
"Isolation of a CDNA encoding a novel chicken chemokine homologous to mammalian macrophage inflammatory protein-1 beta.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegious (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                            Hughes S.M., Bumstead N.; "mapping of the gene encoding the chicken homologue of the mammalian chemokine SCYA4,"; Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                               Petrenko O., Enrietto P.J.;
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMALL INDUCIBLE CYTOKINE A4 HOMOLOG
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Pred. No. 8e-09;
8; Mismatches 38; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      M -> L (IN REF. 1).
50AF9679A267408F CRC64;
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BY SIMILARITY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -!- SUBUNIT: HOMODIMER (BY SIMILARITY).
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                                                                                                                                                                                                                                           [3]
SEQUENCE OF 14-90 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; L34553; AAA48747.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                  Gene 160:305-306(1995).
                                                                                                                                                                                                                                                                                                                                         (BY SIMILARITY)
                                                                                                                                         SEQUENCE FROM N.A.
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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"Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel member of rat GRO/CINCs, is a predominant chemokine produced by lipopolysaccharide-stimulated rat macrophages in culture.";

Biochem. Biophys. Res. Commun. 220:945-948(1996).

-! FONCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS, BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MARCHOPHAGE PRODUCTION OF THE "ALCOMA WHICH IN TORN UP-REGULATES VASCULAR ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROFIEN
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INDUCTION: BY LIPPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYtokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                               macrophage
                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. TISSUE-Lung; STRAIN-Long Evantage STRAIN-Long Evans TISSUE-Lung; MEDLINE-9523890: PubMed-7722328; Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.; Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.; Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
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                                                                                                        Shi M.M., Godleski J.J., Paulauskis J.D.;
"Molecular cloning and posttranscriptional regulation of
inflammatory protein-1 alpha in alveolar macrophages.";
Biochem. Biophys. Res. Commun. 211:289-295(1995):
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             33; Indels
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-> W (IN REF. 2 AND 3).
14E861C647F9A2EB CRC64;
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Pred. No. 9.3e-09;
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InterPro; IPR001811; Chemokine_IL8.
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4 U
SEQUENCE FROM N.A.
STRAIN-CD-1; TISSUE-Lung;
MEDLINE-95298037; PubMed-7779098;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-96183056; PubMed-8607872;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         acute lung injury in rats.";
J. Immunol. 154:4793-4802(1995).
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es 28; Conserv
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SY05_HUMAN
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                                                                                                                                                                              ST03_MOUSE STANDARD; PRT; 92 AA.
P10855; P14096;
01-JUL-1989 (Rel. 11, Created)
01-JUR-1990 (Rel. 14, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (WIP-1-alpha) (WIP-1-alph
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STRAIN-BALB/CJ, DBA/2J, NOD/LTJ, SJL/J, and B10.S/J; TISSUE=Spleen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIINE-88258380; PubMed-3290382; Davitels G., Tekamp-Olson P., Wolpe S.D., Hermsen K., Luedke C., Galtegos C., Coit D., Merryweather J., Cerami A.; "Cloning and characterization of a cDNA for murine macrophage thifanmmatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties."; J. Exp. Med. 167:1939-1944(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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J. Exp. Med. 170:2189-2189(1989).
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Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
A family of small inducible proteins secreted by leukocytes
members of a new superfamily that includes leukocyte and
fibroblast-derived inflammatory agents, growth factors, and
indicators of various activation processes.";
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Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases
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"CDNA sequences of two inducible T-cell genes.";
Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
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MEDLINE-91237116; Pubmed-2033269;
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MEDLINE-88154745; Pubmed-3279154;
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PGVIFLTKRNRQICADPK 77
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                                                                                                                                                                                                                                           NEUTROPHILS.
--- SUBCELLULAR LOCATION: Secreted.
--- TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
--- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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                                                                                                                                                PROPERTIES. HAS A POTENT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
Wolpe S.D., Davatelis G., Sherry B., Beutler B., Hesse D.G., Nguyen H.T., Moldawer L.L., Nathan C.F., Lowry S.F., Cerami A.; Macrophages secrete a novel heparin-binding protein with inflammatory and neutrophil chemokinetic properties."; J. Exp. Med. 167:570-581(1988).
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8BFF2DE7C6DEDD38 CRC64;
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V -> A (IN REF. 3).
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P13501; 043646; Q9NYA2;
01-JAN-1990 (Rel. 13, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
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PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Inflammatory response;
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BY SIMILARITY
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InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB: 1.
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EMBL, AF065940; AAC17507.1;
EMBL, AF065941; AAC17508.1;
EMBL, AF065942; AAC17509.1;
EMBL, AF065943; AAC17510.1;
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63 IFLTKRNRQICADSK 77
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Best Local Similarity 38.7%
Matches 29; Conservative
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PIR, A30552, A30552.
PIR, A32393; A32393.
PIR, S04533; S04533.
PIR, S11685; S11685.
HSSP; P13236; JHUM.
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                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
MEDILTB-99258475; PubMed-10213461;
MEDILTB-99258475; PubMed-10213461;
MONINJAMA H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
"Organization of the chemokine gene cluster on human chromosome 17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and RANTES."
                                                                                                                                                              human T cell-specific molecule is a member of a new gene family."; Immunol. 141:1018-1025(1988).
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta) (T cell-specific protein P228) (TCP228).
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Hoover D.M., Shaw J., Gryczynski Z., Proudfoot A.E.İ., Wells T.N.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lubkowski J.;
The crystal structure of Met-RANTES: comparison with native RANTES and AOP-RANTES.";
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                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H.,
Picard L., Widdawer A., Lubkowski J., Kent S.B.;
"Total chemical synthesis and high-resolution crystal structure
the potent anti-HIV protein AOP-RANTES.";
Chem. Biol. 6:43-51(1999).
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
Zeng O.P., Yang R.Y., Fu L.C.;
The complete sequence of human beta-chemokine RANTES mRNA.";
Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
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"Proton NNR assignments and solution conformation of RANTES, chemokine of the C.C type.";
Blochemistry 34:5329-5342(1995).
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Chung C. W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C.;
"The three-dimensional solution structure of RANTES.";
BIOchemistry 34:9307-9314(1995).
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Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Strausberg R.;
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Identification of RANTES, MIP-1 alpha, and MIP-1 be HIV-suppressive factors produced by CD8+ T cells."; Science 270:1811-1815(1995).
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                                                                                                           SEQUENCE FROM N.A.
MEDLINE-88285659; PubMed-2456327;
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                                         Homo sapiens (Human)
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SEQUENCE FROM N.A.
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                                                                                 NCBI_TaxID=9606
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SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS, AND ACTIVATES EOSINOPHILS. BINDS TO CCR1, CCR3, CCR4 ACCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+CELLS. RECOMBINANT PROFIEIN INDUCES A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, AND SIMIAN
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response;
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                                                                                                         IMMUNODEFICIENCY VIRUS (SIV).
SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A -> R (IN REF. 1 AND 4).
A -> V (IN REF. 4).
FBOBFAF9A87C620F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26.5%; Score 121.5; DB 1; 29.9%; Pred. No. 9.6e-08; ive 20; Mismatches 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65 VVLLTFRDKXICADPRVPXXKMILNKL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 VVEVTRKNRQVCANPEKKWVREYINSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AF043341; AAC03541.1; -. AF088219; AAC63331.1; -. AF266753; AAF73070.1; -. BC008600; AAH08600.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; M21121; AAA36725.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14
9990 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 29.9°
Matches 26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genew; HGNC:10632; SCYA5.
MIM; 187011; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; if No. 1. Pfam; PF00048; ILB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23
91
57
73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1HRJ; 14-OCT-96.
1RTN; 03-JUN-95.
1RTO; 03-JUN-95.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PDB; 1B3A; 23-APR-99.
PDB; 1EQT; 19-APR-00.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SMART; SM00199; SCY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR; A28815; A28815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3D-structure
SIGNAL
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CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SY14_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PDB;
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DB 1; Length 93;

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93 AA; 10678 MW; DDDB899DC9148836 CRC64;
                                                     Local Similarity
nes 22; Conserv
                                                                                                                                                                                                                                                                                                                              SY05_MOUSE
                                                                                                                                                                                           5
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             encoding
                                       Query Match
                                                                                                                                                                                                                                                                                                                                              P30882;
                                                                                                                                                                                                                                                                                                            SY05_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCYA5
                                                                         Matches
                                                                                                                                                                                                                                                                                        RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATALES. 1

1. TATALES. 1

1. TATALES. 1

1. TATALES. 1

2. INTERFERENCE CYTCKINE Res. 19:227-234(1999).

2. INTERFERENCE THAT ALSO RECGGNIZE MIP-1 ALPHA. IT INDUCED

1. TATALED CA2+ CHANGES AND ENZYME RELEAST, BUT NO CHEMOTAXIS,

2. AT CONCENTRATIONS OF 100-1, 000 NM, AND WAS INACTIVE ON T

1. YMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE

PROLIFERATION OF CO34 WYELLOID PROGENITOR CELLS.

2. INTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;

3. ARE PRODUCED BY ALTERNATIVE SPLICING.

2. ILSSUES SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL

2. TISSUES SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL

2. TISSUES: SPEERN, LIVER, SKEEFTAL AND HEART MUSCLE, GUT, AND BONE

3. MARROW, PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.

3. CONTRACTOR OF COST THE INTERCRINE BETA FAMILY (SMALL CYTOKINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.

BY SIMILARITY.

R -> QTGGKPKVVKIQLKLVG (IN ISOFORM HCC-3).
                                                                                                                                                                                                                                                                                                    Pardigol A., Forssmann U., Zucht H.-D., Loetscher P., Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.; "HCC-2, a human chemokine: gene structure, expression pattern, and
                                                                     TISSUE-Bone marrow;
MEDLINE-96136773; PubMed-8551238.
MEDLINE-96136773; PubMed-8551238.
MEDLINE-96136773; PubMed-8551238.
MEDLINE-96136773; PubMed-8551238.
Medert H. J., Dewald B., Meyer M., Cetin Y.,
Kubbles M., Tomeczkowski J., Kirchhoff K., Raida M., Adermann K.
Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,
Mist A., Rorssmann W.-G.;
"HCC-1, a novel chemokine from human plasma.";
J. Exp. Med. 183:295-299(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-99228475; PubMed-10213461;
Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
"Organization of the chemokine gene cluster on human chromosome
Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMALL INDUCIBLE CYTOKINE A14.
                                                                                                                                                                                                                                                                                                                                                              biological activity.";
Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00048; II8; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYCKine; Signal; Alternative splicing.
SIGNAL
CHAIN
20
93
SMALL INDUCIBL
DISULEID
35
59
BY SIMILARITY.
VARSPLIC
27
27
R -> QTGGKPKVV
                                                       FROM N.A., AND SEQUENCE OF 20-93.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                                                                                                                                                                  MEDLINE-98263352; PubMed-9600961;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AF088219; AAC63329.1; -. AF088219; AAF23982.1; -. P13236; 1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; Z49270; CAA89264.1; -. EMBL; Z70292; CAA94307.1; -. EMBL; Z70293; CAA94309.1; -. EMBL; Z49269; CAA89263.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genew; HGNC:10612; SCYA14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HSSP; P13236;
                                                                                                                                                                                                                                                                  TISSUE-Liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MIM; 601392
                                                       SEQUENCE
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EMBL;
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                                                                                                                                       3 RLQTALLVVLVLLAVAL----QATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSD
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-!- SUBCELLUIAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SWALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Isolation and characterization of cDNA from renal tubular epithelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUN-1994 (Rel. 29, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta) (MuRantes).
                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDILINE—94132613; PubMed—7507961;
Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Nellson E.G.;
"Cloning, genomic organization, and chromosomal localization of the Scya5 gene encoding the murine chemokine RANTES.";
J. Immunol. 152:1182-1189(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Schall T.J., Simpson N.J., Mak J.Y.; "Molevallar contains and find and expression of the murine RANTES cytokine: structural and functional conservation between mouse and man."; Eur. J. Immunol. 22:1477-1481(1992).
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&
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MEDIINE=94217689; PubMed=7513046;
Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N.,
Paznekas W.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE STAIN-BALB/CJ.BIO.S/J, NOD/LTJ, and SJL/J; TISSUE-Spleen; Ma R.Z., Teuscher C.; Authoritted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
: Score 119; DB 1; Length 93; Pred. No. 2e-07; 19; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE-92277990; Pubmed-1375672;
Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
Krensky A.M., Neilson E.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91 AA.
                                                                                                                                                                                                                                                                           79
                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE=92289805; PubMed=1376260;
                                                                                                                                                                                                                                                                               SCPRPGVVLLTFRDKXICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Rel. 26, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              encoding murine Rantes.";
Kidney Int. 41:220-225(1992).
26.0%;
llarity 27.2%;
Conservative 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-1993
01-JUN-1994
15-JUN-2002
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DISULFID
SEQUENCE
                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                   SIGNAL
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          δ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 RLOTALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPR 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-LONG Evans; TISSUE-Lung;
Jones M.L., Shanley T.P., Ward P.A.;
Junes M.L., Shanley T.P., Ward P.A.;
Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
-!- SUBCELLUAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytckine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus (Rat),
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                             InterPro; irrucio...,
Pfam; PR0048; II8; 1.
SMART; SM00199; SCY; 1.
PROSITE; P800472; SMALL_CYTOKINES_CC; 1.
PROSITE: Chemntaxis; T-cell; Signal; Inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                           Score 117; DB 1; Length 91; Pred. No. 3.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     44; Indels
                                                                                                                                                                                                                                                                                                                                     SMALL INDUCIBLE CYTOKINE BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                   5DFD66F4684FE1C8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                          T -> A (IN REF. 2).
A -> E (IN REF. 1).
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                                                                                                                                                                                                                                 MGD; MGI:99262; Scya5.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
                                                                                                                                EMBL, S37648; AAB22330.1; --
EMBL, 7002298; AAA18302.1; --
EMBL, X70675; CAA50011.1;
EMBL, AF065944; AAC17511.1; --
EMBL, AF065945; AAC17512.1; --
EMBL, AF065946; AAC17513.1; --
EMBL, AF065947; AAC17513.1; --
EMBL, AF065947; AAC17513.1; --
EMBL, AF065947; AAC17513.1; --
EMBL, AF065947; AAC17514.1; --
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                                                                                                                    EMBL; M77747; AAA40029.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                  91 AA; 10071 MW;
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28.1%;
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SEQUENCE
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P50231;
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P13256; P22617; 013704;
01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
15-JUN-2002 (Rel. 14, Last annotation update)
Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory protein 1-beta) (MIP-1-beta) (T-cell activation protein 2) (ACT-2) (PAT A4) (H400) (SIS-gamma) (Lymphocyte activation gene-1 protein)
(LAG-1) (HC21) (G-26 T lymphocyte-secreted protein).
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"Mitogenic activation of human T cells induces two closely related
genes which share structural similarities with a new family of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Leonard W.J.;
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InterPro; IPR001811; Chemokine_IL8.
Pfam; PF0048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYTOKINE; Chemotaxis; T-cell; Signal; Inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25.4%; Score 116.5; DB 1; Length 92; 30.0%; Pred. No. 3.8e-07;
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Proc. Natl. Acad. Sci. U.S.A. 85:9704-9708(1988).
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60 NLAVVEVTRRNRQVCANPEKKWVQEYINYL
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35 74
92 AA; 10170 MW;
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Matches 27; Conservative
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                                                                                                                                                                                                                                                                     HSSP; P13501; 1RTN
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 copyright. It is produced through a collaboration
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Inflammatory response; Signal; 3D-structure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25.2%; Score 115.5; DB 1; Length 92; 33.8%; Pred. No. 5.1e-07; Live 13; Mismatches 37; Indels
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10212 MW; F2EA7CF341B0E258 CRC64;
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T -> C (IN REF. 7

A -> S (IN REF. 6

P -> L (IN REF. 2
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InterPro; IPR001811; Chemokine_ILB.
InterPro; IPR001811; Chemokine_ILB.
PRam; PF00048; ILB; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
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                                                                                                                                                                                                                               M69201; AAB00790.1; JOINED.
M69202; AAB00790.1; JOINED.
AC003976; -; NOT_ANNOTATED_CDS.
M57503; AAA36752.1; -
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X53682; CAA37722.2; ALT_SEQ.
X16166; CAA34291.1; -.
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                                                                                                                          M23502; AAA36656.1;
                                                                                                                                                                                                                                                                                                                                                                        PDB; 1HUM; 30-APR-94.
PDB; 1HUN; 30-APR-94.
Genew; HGNC:10630; SCYA4.
                                                                                                                                                        AAA51576.1;
                                                                                                                                                                                                                  EMBL; M69203; AAB00790.1;
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Best Local Similarity 33.8°
Matches 26; Conservative
This SWISS-PROT entry is
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                                                                                                                                                                                                                                                                                                            PIR, B30574; B30574.
PIR, D30552; D30552.
PIR, JH0319; JH0319.
PIR; A37411; A37411.
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PIR; B30574; B30574
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ID SY03_HUMAN
AC P10147;
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SIGNAL
CHAIN
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DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- SUBCELLULAR LUCALION. CONTROL BETA FAMILY (SMALL CYTOKINE INDUCTION: BY MITGENS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC):
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lodi P.J., Garrett D.S., Kuscewski J., Tsang M.L.S., Weatherbee J.A., Leonard W.J., Gromenborn A.M., Clore G.M.;
"High-resolution solution structure of the beta chemokine hMIP-1 beta by multidimensional NMR.";
Science 263:1762-1767(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Identification of the CC chemokines TARC and macrophage inflammatory protein-1 beta as novel functional ligands for the CCR8 receptor."; Eur. J. Immunol. 28:582-588(1998),
                                                                                                                                                                                                                                                                                                                                         The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/Tax
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                                                         Baixeras E., Roman-Roman S., Jitsukawa S., Genevee C., Mechiche S., Viegas-Pequignot E., Hercend T., Triebel F.; "Cloning and expression of a lymphocyte activation gene (LAG-1)."; Mol. Immunol. 27:1091-1102(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 6-92 FROM N.A. MEDILINE-9003852; PubMed-2809212; MAILER M.D., Hata S., Waal Malefyt R., Krangel M.S.; Miler M.D. polypeptide secreted by activated human T lymphocytes."; J. Immunol. 143:2907-2916(1989).
                                                                                                                                                                                    Chang H.C., Reinherz E.L.; "Isolation a cDNA encoding a putative "Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2 structure on
                                                                                                                                                                                                                                                                                                            Napolitano M., Modi W.S., Cevario S.J., Gnarra J.R., Seuanez H.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-96106406; PubMed-8525373;
Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RECEPTOR INTERACTION.
MEDILE-98180363; PubMed-9521068;
Bernardini G., Hedrick J., Sozzani S., Luini W., Spinetti G., Welss M., Menon S., Zlotnik A., Mantovani A., Santoni A.,
                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
Birren B., Fasman K., McKernan K., Nusbaum C., Richardson
Lander E.;
                                                                                                                                                                                                                                                                                                                                                        responsiveness of 5' upstream sequences, and chromosomal localization.";
J. Biol. Chem. 266:17531-17536(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV). SUBUNIT: HOMODIMER.
                                                                                                                                                                                                                                              Eur. J. Immunol. 19:1045-1051(1989).
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                            SEQUENCE FROM N.A.
MEDLINE-91061800; PubMed-2247088;
                                                                                                                                                                     MEDLINE-89325421; PubMed-2568930;
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MEDLINE-94182137; PubMed-8134838;
J. Immunol. 142:679-687(1989).
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                                                                                                                                        SEQUENCE FROM N.A.
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P16619;
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01-WAR-1989 (Rel. 10, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (Tonsillar lymphocyte LD78 alpha protein) (GO/G1 switch regulatory protein 19-1) (GOS19-1 protein)
CSIS-beta) (PAT 464.1).
SCYA3 OR GOS19-1 OR MIP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "BB-10010: an active variant of human macrophage inflammatory protein-
l alpha with improved pharmaceutical properties.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
BINDS TO CCR1, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE
FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-ALPHA INDUCES
A DOSE-DEPENDENT INHEBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2,
SUBCELLULAR LOCATION: Secreted.
INDUCTION: BY TPA OR PHA (TPA = 12-0-TETRADECANOYL PHORBOL-13
ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARÍTY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC). STRONG, TO SCYAJIL.
                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-91103879; PubMed-2271120;
Blum S., Forsdyke R.E., Forsdyke D.R.;
"Three human homologs of a murine gene encoding an inhibitor of stem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells.";
Science 270:1811-1815(1995).
                                                                                                                                                                                                                                                                                                               Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.; "Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of generated factors.".
                                                                                                                     Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-96106406; PubMed-8525373;
Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
                                                                                                                                                                                                          Obaru K., Fukuda M., Maeda S., Shimada K.;
"A cDNA clone used to study mRNA inducible in human tonsillar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nakao M., Nomiyama H., Shimada K.; "Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 24-92, AND MUTAGENESIS OF ASP-49.
MEDLINE-96127782; PubMed-8541527;
Hunter M.G., Bawden L., Brotherton D., Craig S., Cribbes S.,
Czaplewski L.G., Dexter T.M., Drummond A.H., Gearing A.H.,
Edworth C.M., Lord B.I., McCourt M., Varley P.G., Wood L.M.,
Edwards R.M., Lewis P.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 27-40 AND 71-83, AND FUNCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mol. Cell. Biol. 10:3646-3658(1990)
                                                                                                                                                                                                                                      lymphocytes by a tumor promoter.";
J. Biochem. 99:885-894(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-90287155; PubMed-1694014;
                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE-86223879; PubMed-3086300;
                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE-89140347; PubMed-2521882;
                                                                                                                                                                                                                                                                                                                                                                      Immunol. 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA Cell Biol. 9:589-602(1990).
                                                                                                                   Eukaryota; Metazoa; Chordata;
Mammalla; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 23-92 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Blood 86:4400-4408(1995)
                                                                                                      Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                              cell proliferation.
                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                          secreted factors.
                                                                                                                                               NCBI_TaxID=9606;
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the European the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
This SWISS-PROT entry is copyright. It is produced through a collaboration
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-AUG-1990 (Rel. 15, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 like 1 precursor (Tonsillar lymphocyte
LD78 beta protein) (G0/G1 switch regulatory protein 19-2) (G0S19-2
protein) (PAT 464.2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Irving S.G., Zipfel P.F., Balke J., McBride O.W., Morton C.C., Burd P.R., Siebenlist U., Kelly K.; Two inflammatorry mediator cytokine genes are closely linked and variably amplified on chromosome 17q."; Nucleic Acids Res. 18:3261-3270(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BY SIMILARITY.
BY SIMILARITY.
D-As: IN BB-10010; IMPROVED PHARMACEUTICAL PROPERTIES.
517865D5D6776CA8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 114; DB 1; Length 92; Pred. No. 7.7e-07; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMALL INDUCIBLE CYTOKINE A3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMART; SW00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYtokine; Chemotaxis; Inflammatory response; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
                                                                                                                                                                                                     M23452; AAA36316.1; -. M25315; AAA57255.1; -. X03754; CAA27388.1; -. X04018; CAA27348.1; -. M23178; AAA35858.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-90287702; PubMed-1972563;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60 CPRPGVVLLTFRDKXICADP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15;
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| CSKPGVIFLTKRSROVCADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MW.
                                                                                                                                                                                  EMBL; D00044; BAA00029.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.98;
                                                                                                                                                                                                                                                                                                                                        EMBL; AF04339; AAC03539'1;
PIR; A24198; A24198.
PIR; A30574; A30574.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Genew; HGNC:10627; SCYA3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                            D90144; BAA14172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00048; IL8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                     HSSP; P13236; 1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 t Local Similarity
ches 26; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCYA3L1 OR G0S19-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92 AA;
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15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29.48;
                                                                                                                                                                                                                                                                                                                                                                            EMBL; U77037; AAC53293.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 29.4 nes 25; Conservative
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                                                                                                        STRAIN-Dunkin-Hartley;
                       protein) (SIS-delta).
                                                                                                                                                   [2]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91 AA;
                                                                                                SEQUENCE FROM N.A.
                                                                          NCBI_TaxID=10141;
                                                                                                                                                                       TISSUE=Lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cytokine; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 ALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRPGVV 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7 ALAVLLCTMALCUQVLSA-PLAAD-TPTACCFSYTSRQIPQNFIADYFETSSQCSKPSVI 64
                                                                                                                                                                             Blum S., Forsdyke R.E., Forsdyke D.R.; "Three human homologs of a murine gene encoding an inhibitor of stem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SMALL INDUCIBLE CYTOKINE A3 LIKE 1.
                                                                                                       Nakao M., Nomiyama H., Shimada K.; "Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A7A79E774006D61E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Score 114; DB 1;
; Pred. No. 7.7e-07;
13; Mismatches 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SY05_CAVPO STANDARD; PRT; 91 AA. P97272; 009076; 01-NOV-1997 (Rel. 35, Created) 01-NOV-1997 (Rel. 35, Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
InterPro; IPR001811; Chemokine_ILB.
SMART; SM0019; ILB; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                      Cell. Biol. 10:3646-3658(1990)
                                                                                   SEQUENCE FROM N.A. MEDLINE-90287155; PubMed-1694014;
                     PubMed=2271120;
                                                     cell proliferation.";
DNA Cell Biol. 9:589-602(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytokine; Chemotaxis; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93 AA; 10161 MW;
                                                                                                                                                                     TISSUE-Pancreas, and Spleen;
                                                                                                                                                                                                                                                                                                                                  EMBL; X52149; CAA36397.1; -.
                                                                                                                                                                                                                                                                                                                                             M24110; AAA35859.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24.98;
34.28;
                                                                                                                                                                                                                                                                                                                                                      D90145; BAA14173.1; -. BC027888; AAH27888.1;
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Best Local Similarity 34.4...
Local Similarity 34.4...
Local Similarity 34.4...
                                                                                                                                                                                                                                                                                                                                                                                                                               Genew; HGNC:10628; SCYA3L1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | | | : :||||
65 FLTKRGRQVCADP 77
                                                                                                                                                                                                                                                                                                                                                                        PIR; B30908; B30908.
PIR; B30412; B30412.
PIR; B35673; B35673.
PIR; S10157; S10157.
HSSP; P13236; 1HUM.
                     MEDLINE-91103879;
                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                       601395;
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           SEQUENCE
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-i- SUBCELLULAR LOCATION: Secreted.
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 precursor (CCLA) (Macrophage inflammatory protein 1.beta) (MIP-1.beta).
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                                        Euteleostomi;
Cavia porcellus (Guinea pig).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostc
Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PS00472; SWALL_CYTOKINES_CC; 1. Chemotaxis; T-cell; Signal; Inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 112.5; DB 1; Length 91;
Pred. No. 1.1e-06;
19; Mismatches 38; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Asano K., Nakamura M., Oguma T., Fukunaga K., Ishizaka A.,
Yamaguchi K., Kanazawa M.;
Submitted (APR-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
SMALL INDUCIBLE CYTOKINE A5.
                                                                                                                                                                                                                                                   Campbell E.M., Proudfoot A.E.I., Yoshimura T., Allet B., Wells T.N.C., White A.M., Westwick J., Watson M.L.;
Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
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BY SIMILARITY
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HSSP; P13501; 1RTN.
INTERPRO; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
SMART; SM00199; SCY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       :| ::: :||:| : + | EVTRKNRQVCANPEKKWVREYINSL 88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPR 62
                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Score 110.5; DB 1; Length 92;
; Pred. No. 2e-06;
16; Mismatches 45; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMALL INDUCIBLE CYTOKINE A4.
BY SIMILARITY.
BY SIMILARITY.
60B451EEEEC7103D CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SMALL_CYTOKINES_CC; 1.
CYtokine; Chemotaxis; Inflammatory response; Signal.
SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 24.1%;
Best Local Similarity 30.3%;
Matches 27; Conservative 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; U06434; AAA96497.1; -.
Rattus norvegicus (Rat)
                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92 AA;
                                                                                                         NCBI_TaxID-10116
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Search completed: July 28, 2003, 04:01:12 Job time : 5.88445 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

July 28, 2003, 03:58:28 ; Search time 17.1933 Seconds Run on:

(without alignments) 1114.528 Million cell updates/sec

US-09-509-165A-25 Title: Perfect score:

458 1 MARLQTALLVVLVLLAVALQ.....XICADPRVPXXKMILNKLSQ Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

671580 seqs, 206047115 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SPTREMBL\_21:\* Database

sp\_archea:\* sp\_bacteria:\* sp\_fungi:\*

sp\_unclassified:\* sp\_human:\*
sp\_invertebrate:\*
sp\_mammal:\* sp\_rvirus:\*
sp\_bacteriap:\*
sp\_archeap:\* sp\_virus:\*
sp\_vertebrate:\* sp\_organelle:\* sp\_phage:\* sp\_rodent:\* sp\_plant:\* sp\_mhc:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES	ID Description	Q9QZUZ	Q91ZH5 O91Zh5 rattus norv	Q9QZU1 cattus norv	Q91265 sigmodon h.		Q910C9 Gallus gal		_	3 098158	095n01	Q8SQ40 Q8sq40 felis silve		Q8SQA6 Q8sqa6 bos taurus		O9WUZ6 mus musculu	
	DB	=	11	11	11	13	13	13	11	12	9	9	13	9	4	11	•
	° Query Match Length DB	92	92	81	92	90	90	91	92	95	66	92	83	66	93	93	
đ	Query Match	64.4	62.9	59.8	29.3	28.7	28.5	27.9	27.8	27.7	27.5	27.3	26.2	26.0	24.9	24.8	
	Score	295	288	274	134	131.5	130.5	128	127.5	127	126	125	120	119	114	113.5	
	Result No.	-	8	m	4	2	9	7	80	O	10	11	12	13	14	15	

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61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLS 92

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Q91z11 sigmodon hi Q9ere0 rattus norv Q14745 homo sapien Q8q56 gallus gall Q9wtT7 macaca mula Q9d830 mus musculu	Ogttql equus cabal Ogj2ml macaca mula Og9m24 mus musculu Og5md5 bos taurus Ogttq2 equus cabal Og1784 mus musculu Og2184 equus cabal	095689 homo sapien 094yd7 mus musculu 084955 gallus gall 09tts6 bos taurus 09ttq3 equus cabal 08sqb1 bos taurus 083145 mouse cytom 09hq12 bos taurus	092292 cricetulus 091444 mus musculu 0904x28 mus musculu 090825 gallus gall P88968 kaposi's sa 09qus5 mus musculu
23.8 23.3 20.7 20.2	19.5 75 6 19.2 118 12 19.0 116 11 18.6 100 6 18.3 81 6 18.0 133 11 17.5 97 1	4 11 11 12 17 17 17	15.9 106 11 15.6 395 11 14.8 86 11 14.7 96 13 14.7 114 12 14.6 76 11
17 106.5 18 106.5 19 104.5 20 95.5 21 92.5 22 91	<b>ω ω</b>	31 79.5 32 70 33 77.8 35 77.8 36 75.5 37 75.5 39 74.5	40 73 42 73 42 68 43 67.5 44 67.5 67 67.5 67.5 67.5 67.5 67.5 67.5 6

## ALIGNMENTS

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1 MARLQTALLVVLVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC 60
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                                                                                                                                                                                                                                                                                                    Mus musculus (Mouse).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gray P.W.;
"Macrophage derived chemokine is localized to thymic medullary epithelial cells and is chemotactic for CD3+, CD4+, CD8+/- thymocytes.";

ENGL 0.0-0(1999).

EMBL: AF163476; AAD55763.1; -.

MGD: MGI:306779; SCya22.

MGI:306779; SCya22.

MGI:306779; SCya22.

SEQUENCE 92 As; 10331 MW; 17FE31A87F352E63 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=BALB/C;
Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
Gray P.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64.4%; Score 295; DB 11; Length 92; 58.7%; Pred. No. 3.2e-32; tive 18; Mismatches 20; Indels
                                                                                     01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
92 AA.
     PRT;
                                                                                                                                                                                                                                  Macrophage-derived chemokine.
SCYA22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 64.4%,
Best Local Similarity 58.7%,
Matches 54; Conservative
PRELIMINARY;
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0902U2
0902U2;
          DDT THE LEAD OF THE COLOR OF TH
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Gaps

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**0912H5** 

RESULT **0912H5** 

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12 LVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRPGVVLLTFR 71
                                                                                                3 RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPR 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Blanco J.C., Pletneva L.M., Prince G.A.; "Sigmedon hispidus cytokines, chemokines and interferons."; Sigmedon hispidus cytokines, chemokines and interferons."; EMBL, 4X059407; AAL26704.1: -
InterPro; IPR001827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; I.
SEQUENCE 92 AA; 10334 MW; CF9AAB3D94DCAF79 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29.3%; Score 134; DB 11; Length 92; 31.5%; Pred. No. 2.2e-10; ive 20; Mismatches 39; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
Hughes S.M., Bumstead N.;
Hughes S.M., Bumstead N.;
"Mapping of the gene encoding the chicken homologue of the lemokine SCYA4.";
Submixted (APP.1199) to the EMBL/GenBank/DDBJ databases.
EMBL; AF146730; AAD48772.1;
Length 81;
                                                                                                                                                                                                                                                                                                                            01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Last sequence update)
Last annotation update)
59.8%; Score 274; DB 11; 61.7%; Pred. No. 2e-29;
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                                                                                                                                                                                                                                                                                         92 AA.
                    Pred. No. 2e-2
15; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                        Macrophage inflammatory protein-1 alpha MIP1 ALPHA.
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01-MAY-2000 (TrEMBLrel. 13, Last seq
01-MAR-2002 (TrEMBLrel. 20, Last ann
                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                     72 DKXICADPRVPXXKMILNKLS 92
                                                                                                                                                                             :: ||||||: | ||:||: | 61 NRDICADPRMLWVKKILHKLA 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 31.59
Matches 28; Conservative
                  Best Local Similarity 61.7
Matches 50; Conservative
                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID-42415;
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  Query Match
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Q9PWA6;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacon K.B., Feng L.;
"Mononuclear cell-infiltrate inhibition by blocking macrophage-derived chemokine results in attenuation of developing crescentic submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF432871; AL30397.1; -.
Pfam; PF00048; ILB; 1.
                                                                                                                                                                                                                                                                                                                                                                                  García G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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thymocytes.",
Blood 0:0-0(1999).
EMBL; AF163477; AAD55764.1; -.
EMBL; AF163477; AAD55764.1; -.
EMBL; AF163477; CM9.
InterPro: IPPROUB1; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-SPRAGUE-DAWLEY; TISSUE-THYMUS;
Chantry D.H., Romagnan1 P., Raport C.J., Epp A., Romagnan1 S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81 AA; 9212 MW; A0A7ED1A0045D80B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             090201;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Macrophage-derived chemokine (Fragment).
                                                                                                                                                01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 288; DB 11;
Pred. No. 2.9e-31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62.9%; Sco...
58.7%; Pred. No. 2...
16; Mismatches
61 PRPGVVLLTFRDKXICADPRVPXXKMILNKLS 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 :|||||:| :: ||||||: | ||:||:
61 RKPGVVLITIKNRDICADPRMLWVKKILHKLA 92
                                                                                                              92 AA.
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                                                                                                                PRT;
                                                                                                                                                                                                           Macrophage-derived chemokine CCL22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 58.79
Matches 54; Conservative
                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                 Rattus norvegicus (Rat).
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SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                            NCBI_TaxID-10116;
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SEQUENCE FROM N.A.
MEDLINE=21655115; PubMed=11797102;
Hughes S., Haynes A., O'Regan M., Bumstead N.;
"Identification, mapping, and phylogenetic analysis of three novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=42415;
NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                     091ZL0;
01-DEC-2001 (
01-DEC-2001)
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Q98158; Q1256
Q1-FEB-1997
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                                                                                                                                         3 RLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPR
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                       TEQUENCE FROM N.A.
Hughes S.M., Bumstead N.;
"Mapping of the gene encoding the chicken homologue of the mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                            DB 13; Length 90;
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                                                                                         28.7%; Score 131.5; DB 13; Length 33.7%; Pred. No. 4.7e-10; Live 19; Mismatches 37; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           chemokine SCTA4. ;
Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL, AJ243034; CAB45103.1;
InterPro; IPRO00812, CC_chemkine_sml.
InterPro; IPRO01811; Chemokine_IL8.
Ffam; PF00048; IL8; 1.
SROUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
                              Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SEQUENCE 90 AA; 9986 MW; 50AF9679A26751CB CRC64;
                                                                                                                                                                                                                                                                                          01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DR-2002 (TrEMBLrel. 20, Last annotation update)
Macrophage inflammatory protein 1-beta.
SCYA4.
Gallus gallus (Chicken).
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Last annotation update)
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        InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8
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01-JUN-2002 (TrEMBLrel. 21, Last seq
01-JUN-2002 (TrEMBLrel. 21, Last seno
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Best Local Similarity 33.7%
Matches 30; Conservative
                                                                                                    Local Similarity 33.7 tes 30; Conservative
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
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"Sigmodon hispidus cytokines, chemokines and interferons.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AF421392; AAL16933.1; -.
InterPro; IPR000877; CC.Chemkine.sml.
InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                      Length 91;
                                                                                                                                                                                        Indels
chicken CC chemokines.";
Immunogenetics 53:674-683(2001).
EMBL: AY037859; AAK84432.1; -
SEQUENCE 91 AA: 10154 MM; 744A64BB229194EF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00048; IL8; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;
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Last annotation update)
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01-FFB-1997 (TrEMBLrel. 02, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
                                                                                                                                    Query Match 27.9%; Score 128; DB 13; Sest Local Similarity 34.4%; Pred. No. 1.4e-09; Aatches 31; Conservative 18; Mismatches 37;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MARLQTALLUVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSC
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Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                      <u>.</u>
                                                                                                                                                                                                                                            Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D., Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                    SEQUENCE FROM N.A.

BEDLINE-7094384; Pubmed-8939871;

MOORE P. S., Bashoff C., Weiss R.A., Chang Y.;

Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                       MEDLINE-97121480; PubMed-8962146; Russo J.J., Yan M., Maddalena Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ren S., Lin S.-F., Miller G.;
Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases.
EMBL; U75698; AAC57095.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sun R., Lin S.-F., Miller G.;
Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .l protein.
95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;
                                                                                                                                                                                                         roc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996)
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MEDLINE-97296220; Pubmed-9151804;
Sammaherpesvirinae; Rhadinovirus
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                                                                                          Jenes by KSHV.";
Science 274:1739-1744(1996).
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SMART; SM00199; SCY; 1.
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            NCBI_TaxID=37296;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
Maeda S., Mizuno T., Yamashita K., Kurata K., Masuda K., Ohno K.,
Tsujimoto H.;
"Molecular Cloning of Canine Thymus and Activation-Regulated Chemokine
"TARC) Gene and its Expression in Various Tissues.";
J. Vet. Med. Sci. 0:0-0(2001).
EMBL; AB054642; BAB62131.1;
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Felis.
                                                                                                                                                              Euteleostoml;
Canis.
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; Pred. No. 2.9e-09;
18; Mismatches 38; Indels
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Kimura T., Kano R., Hasegawa A.;

"molecular cloning of feline RANTES gene.";

Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.

EMBL, AB083479; BAB88940.1;

SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00048; ILB; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 99 AA; 11052 MW; 6BA28EDDF857BE81 CRC64;
                                                                                                                                                              Eukaryota; Metazoa; Čhordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
NCBI_TaxID-9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Felis silvestris catus (Cat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalla; Eutheria; Carnivora; Fissipedia; Felidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                        Last annotation update)
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99 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65 VIVOGKSICSDPKDKRVKKAVRYLQR 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 LTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; ABOJATOTE; BABOZIJILI,
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
                                              Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
PRT;
                                                                     Last
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PGVVLLTFRDKXICADPR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | || :| | : ||:|:|:
60 PAVVEVTRRKRQVCANPQ 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27.5%;
                                            01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2002 (TrEMBLrel. 20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 27.35
Best Local Similarity 32.68
Matches 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
  PRELIMINARY;
                                                                                                                                          Canis familiaris (Dog)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RANTES protein.
RANTES.
                                                                                                                      Chemokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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RESULT 12

RESULT 10

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us-09-509-165a-25.rspt

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7 ALLVVLVLLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRPGVV 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 ALAVLLCTMALCNQVLSA-PLAAD-TPTACCFSYTSRQIPQNFIADYFETSSQCSKPSVI 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Three chemokines with potential functions in T lymphocyte-independent and -dependent B lymphocyte stimulation."; Eur. J. Immunol. 29:2934-2947(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-UNY-2002 (TrEMBLrel. 21, Last annotation update)
Thymus and activation-regulated chemokine precursor (Small inducible cytokine subfamily A17).
TARC OR ABCD-2 OR SCYA17.
                                                                                                                                                                                                                                               Homo sapiens (Human).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lieberam I., Forster I., The murline b-chemokine TARC is expressed by subsets of dendritic cells and attracts primed CD4+ T cells.". Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Schaniel C., Sallusto F., Ruedl C., Sideras P., Melchers F.,
                                                                                                                                                   01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TEMBLrel. 20, Last annotation update)
Similar to small inducible cytckine A3 (homologous to mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24.9%; Score 114; DB 4; Length 93; 34.2%; Pred. No. 1.2e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      33; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               Strausberg R.; Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases. EMBL; EC007783; AAH07783.1; InterPro; IPR000827; CC_chemkine_sml.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00048; IL8; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 93 AA; 10144 MW; A7A78E374006D61E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 34.2%; Pred. No. 1.2e Matches 25; Conservative 13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93 AA.
                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-99438049; PubMed-10508268;
65 FOTKKGROVCANP 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67 LLTFRDKXICADP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-C3H/EBFE/J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-LIVER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rolink A.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                             Q96168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9ZNM6Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
                                                                  RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 LQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRP 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOKINE K203.
6FA2EA7A4950CA75 CRC64;
                                                           01-007-2000 (TrEMBLrel. 15, Created)
01-007-2000 (TrEMBLrel. 15, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Chemokine K203 precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUN-2002 (TrEMBLrel. 21, Last sequence update) 01-JUN-2002 (TrEMBLrel. 21, Last annotation update) Macrophage inflammatory protein-1 alpha.

Bos taurus (Bovine).
                                                                                                                                                                                                                                                                                                                              MEDLINE-20170941; PubMed-10704244; Sick C., Schneider K., Staehell P., Weining K.C.; "Novel chicken CXC and CC chemokines."; Cytokine 12:181-186(2000).
EMBL; Y18692; CABY0956.1; -- HSSP; P13236; 1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match 26.2%; Score 120; DB 13; Local Similarity 22.2%; Pred. No. 1.7e-08; les 20; Conservative 28; Mismatches 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26.0%; Score 119; DB 6;
35.6%; Pred. No. 2.4e-08;
tive 15; Mismatches 30;
                     89 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 GVVLLTFRDKXICADPRVPXXKMILNKLSQ 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          :::||:| : :::59 AIIFITKKEREVCANPSDPWVQRYLQSVKR 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q8SQA6;
01-JUN-2002 (TrEMBLrel. 21, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22 89
89 AA; 9896 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67 LLTFRDKXICADP 79
                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                               Gallus gallus (Chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                     NCBI_TaxID=9031;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S.
Matches 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Signal.
SIGNAL
                                          Q918E0;
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                     Q918E0
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0918E0
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Gaps

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Araway T., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Arawaya T., Hara A., Shibata K., Yoshino H., Adachi J., Fukuda S., Araway T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Anawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I., Saito T., Okazati Y., Gojobori T., Bono H., Kasukawa T., Saito R., Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Reischmann W., Gaasterland T., Gissi C., King B., Kochiwa H., Kelischmann W., Gaasterland T., Gissi C., Ring B., Kochiwa H., A Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., Rasai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G., Brewnstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., A Gustinoich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H., A Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F., Wanghia H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L., Wanshaw Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MARLQTALLVVLVL----LAVALQATEAGPYGANMEDSVCCRDYVRYRLPLXVVXHFXW 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                               "Functional annotation of a full-length mouse cDNA collection."; Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 113.5; DB 11; Lengton
Pred. No. 1.3e-07;
Limitches 32; Indels 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THYMUS AND ACTIVATION-REGULATED CHEMOKINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases. EMBL, A744287; CA845256.1; -. EMBL, AF125572; AAD56602.1; -. EMBL, AF125571; AAD56601.1; -. EMBL, AF125571; BAB25171.1; -. EMBL, GC028505, AAH28505.1; -. EMBL; GC028505, AAH28505.1; -. HSPP, GO2875; 1049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6EFCD4FDEBEECCCE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       56 TSDSCPRPGVVLLTFRDKXICADPR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MGD; MGI.1329039; Scya17.
InterPro; IPR000827; CC_chemkine_sml
InterPro; IPR001811; Chemokine_ILB:
Pf6m; PF00048; ILB: 1.
SMART; SM00199; SCY: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93 AA; 10466 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 35.3%
watches 30, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
TISSUE-THYMUS GLAND;
                                                                                                                                                                                                                                                                                                                                                               Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Strausberg R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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Search completed: July 28, 2003, 04:02:52 Job time: 18.1933 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

July 28, 2003, 03:59:28; Search time 15.2941 Seconds Run on:

(without alignments) 609.878 Million cell updates/sec

US-09-509-165A-30
390
1 LGFYGANMEDSVCCRDYVRY.....EICADPRVPWVKMILNKLSQ Tit.le: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 908470 seqs, 133250620 residues Searched:

Minimum DB seq length: 0 . Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% . Listing first 45 summaries

A\_Geneseq\_101002: Database :

/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1989.DAT:\*/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1990.DAT:\*/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1991.DAT:\*/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1992.DAT:\*/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1992.DAT:\*/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1992.DAT:\* /SIDS2/gcgdata/geneseg/genesegp-embl/AA1994.DAT: /SIDS2/gcgdata/geneseg/genesegp-emb1/AA2000.DAT:\*/SIDS2/gcgdata/geneseg/genesegp-emb1/AA2001.DAT:\*/SIDS2/gcgdata/geneseg/genesegp-emb1/AA2002.DAT:\* /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:\*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:\*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:\*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:\*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:\*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:\*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

		фP				
Result		Query				
No.	Score		Match Length DB	DB	QI	Description
        	390	100.0	7.0	18	AAW20060	Human marronbage A
7	390	100.0	7.0	20	AAY24413	Macropage derived
m	390	100.0	70	20	AAY05873	Human macrophage-d
4	388	99.5	172	20	AAY29895	Human MDC and huma
S	388	99.5	334	20	AAY29904	Himan MDC and hima
9	388	99.5	587	20	AAY29900	Himan MDC and HTV-
7	386	0.66	69	23	AA020022	Human chemokine MD
80	386	0.66	69	23	AA014155	Human MDC protein
σ	386	0.66	98	19	AAW59432	Human chemokine or
10	386	99.0	93	18	AAW20058	Macrophage derived

Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat

XX PT

Amino acid sequenc Human chemokine pr Macrophage-derived Macrophage-derived Human macrophage-d Macrophage derived A human macrophage-d Macrophage derived A human macrophage-d Reast pre-pro-alph Cytokine beta-13 s Human chemokine be Amino acid sequenc Stem cell mobilisi Human macrophage-d Macaque macrophage-d Macaque macrophage-d	Macrophage derived Human macrophage de Musine Mouse chemokine m Musine chemokine m Mouse chemokine m Mouse chemokine m Mouse chemokine m Mouse macrophage der Human/mouse hybrid Chimeric chemokine Peptide #6559 enco
AAW62783 AAW59433 AAW40811 AAY26175 AAY24414 AAY06871 AA014046 AA014046 AA017604 AAW77881 AAB68352 AAB68352 AAW17668 AAW05879 AAW69879 AAW69879 AAW68939 AAW60879 AAW60879 AAW60879 AAW60879	AAY 24 415 AAY 20 87 4 AAY 20 87 4 AAY 20 87 5 AAY 20 41 6 AAY 20 87 5 AAY 20 87 2 AAB 61 80 8 AAG 78 35 2 AAG 68 35 5 AAG 80 35 5
119 120 120 120 120 120 120 120 120 120	53300000000000000000000000000000000000
	699 699 699 688 688 688 671 775 775
	995.9 992.8 892.8 87.7 668.7 668.7 668.7 55.0 55.0
33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3344 3622 3622 3622 3462 3462 3462 3462
111 112 114 116 118 118 118 118 118 118 118 118 118	28 209 309 309 309 309 44 44 44 44 45 46 46

### ALIGNMENTS

RESULT 1	LT 1
AAW2	AAW20060
a X	AAW20060 standard; Protein; 70 AA.
AC	AAW20060;
X E	11-SED-1997 (first entry)
×	
DE	Human macrophage derived chemokine analogue.
××	
KW	MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
KW	rheumatoid arthritis; chemotaxis; fibroblast proliferation;
KW	wound healing; angiogenesis; inflammation.
XX	
SO	Synthetic.
××	
Νd	WO9640923-A1.
××	
PD	19-DEC-1996.
XX	
PF	07-JUN-1996; 96WO-US10114.
XX	
PR	16-NOV-1995; 95US-0558658.
PR	07-JUN-1995; 95US-0479620.
XX	
PA	(ICOS-) ICOS CORP.
xx	
Ιđ	Godiska R, Gray PW;
XX	
DR	WPI; 1997-052324/05.

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02-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chantry DH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                        Sequence
                                                                                                                                                                                                                                                                                                             AAY05873;
                                                                                                                                                                                                                                                                                                                                                                                                                                       vaccine.
                                                                                                                                                                                                                                                             RESULT 3
AAY05873
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                                                                                                                                                                                                                                                                                                    Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
                                                                                                                                                                                                                                                                                       1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW
                                            A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MDC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a macrophage derived chemokine analogue. The MDC analogue is capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogue may be used to modulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                                                                                                                                                                                                                                    100.0%; Score 390; DB 18; Length 70; 100.0%; Pred. No. 3e-41; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Macrophage derived chemokine analogue MDC (n+1).
disease, rheumatoid arthritis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Column 59; 43pp; English.
                         Claim 25; Page 83; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                           AAY24413 standard; peptide; 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96US-0660542.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96US-0660542
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95US-0558658
                                                                                                                                                                                                                                                  Local Similarity 100.
nes 70; Conservative
                                                                                                                                                                                                                                                                                                                                        61 VKMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                              VKMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R, Gray PW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-443621/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ICOS-) ICOS CORP.
                                                                                                                                                                                                               70 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-NOV-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, arthritis and pulmonary fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents synthetic analogue MDC(n+1) of the novel human macrophage derived C-C chemokine MDC (see also AAY05811). MDC(n+1) consists of a Leu residue following by amino acid residues an entagonist of mature polypeptide. The analogue is expected to be an antagonist of MDC activity, inhibiting activity by competitively binding to the receptor that recognises MDC or by forming inactive heterodimers with MDC. MDC antagonists are used in claimed methods for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting
                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vertebrate Macrophage Derived Chemokines, analogues and antagonists
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced citration, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in a mammal, and for treating asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antagonist: chemoattractant; antiproliferative; dermatological; immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        chemokine; human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).
                                                                                                                                                                                                                                                                              70;
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                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0%; Score 390; DB 20;
Best Local Similarity 100.0%; Pred. No. 3e-41;
Matches 70; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MDC analogue; macrophage derived chemokine; C-C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gray PW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 11; Page 134; 147pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY05873 standard; Protein; 70 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-US20270.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VKMILNKLSO 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 VKMILNKLSQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
                                                                                                                                                                                                                                                                                                                       6-SEP-1999
                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        infection
                                                                                                                                                      AAY29904;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes fusion proteins comprising a chemokine and a tumour antigen or HTV antigen. Specifically claimed fusion proteins comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1; (3) human macrophage-derived chemokine (MDC) and human Muc-1; (4) human SDF-1 and human Muc-1; (5) human IP-10 and HTV gp120; (6) human MCP-3 and HTV gp120; (7) human MDC and HTV gp120; and (8) human SDF-1 and HTV gp120; The fusion proteins, and nucleotide sequences encoding them, can be used for producing an immune response, e.g. an effector T cell immune response. They can also be used for treating can creating or treating or treating or treating or treating or preventing HTV infection. The fusion proteins and/or nucleotide sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      preventing HIV infection. The fusion proteins and/or nucleotide sequences can be used in in vitro diagnostic assays, as well as in screening assays for identifying unknown tumour antigen epitopes and fine mapping of tumour antigen epitopes. The present sequence represents a specifically
                                                                                  1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New fusion polypeptides comprising a chemokine and a tumour antigen of the antigen, used for treating cancers or treating or preventing HIV
                                                                                                                                                                                                                                                                                             Chemokine; tumour; viral; antigen; fusion protein; cancer; vaccine; immune response; HIV; infection.
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                                               Indels
              Score 390; DB 20;
Pred. No. 3e-41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antigen epitopes. The present sequence reposition protein from the present invention
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Pred. No. 1.4e-40;
1; Mismatches 0;
                                             0; Mismatches
                                                                                                                                                                                                                                                                    Human MDC and human Muc-1 fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 11; Page 129-130; 142pp; English.
                                                                                                                                                                                                 AAY29895 standard; Protein; 172 AA.
                      100.0%;
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98.6%;
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                                                                                                                                                                                                                                                (first entry)
                                              Conservative
                                                                                                                   70
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                                                                                                                                VKMILNKLSO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kwak LW, Biragyn A;
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                                                                                                                 61 VKMILNKLSQ
                                  Similarity
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70 AA;
                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                  WO9946392-A1
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                                                                                                                                                                                                                                                17-NOV-1999
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                                             70;
                                                                                                                                                                                                                                                                                                                                          Synthetic.
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Sequence
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                      Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antigen epitopes. The present sequence represents a specifically I fusion protein from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New fusion polypeptides comprising a chemokine and a tumour antigen or HIV antigen, used for treating cancers or treating or preventing HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention describes fusion proteins comprising a chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Human MDC and human scFV fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USSH ) US DEPT HEALTH & HUMAN SERVICES.
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                                                                                                                                                                                                                                      AAY29904 standard; Protein; 334 AA
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Matches 69; Conservative
                                       VKMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 VKMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kwak LW, Biragyn A;
61 VKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-551418/46.
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Gaps

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0; Indels

69; Conservative

Best Local Similarity Matches 69; Conserv

AA.

AAO20022 standard; protein; 69

AA020022

(first entry)

11-JUN-2002

VKMILNKLSQ 70

61

g

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The present invention describes fusion proteins comprising a chemokine and a tumour antigen or HIV antigen. Specifically claimed fusion proteins comprise: (1) human monocyte chemotactic protein-3 (MCP-3) and human Muc-1; (2) human interferon-induced protein 10 (IP-10) and human Muc-1; (3) human macrophage-derived chemokine (MDC) and human Muc-1; (4) human MC-1; (5) human Muc-1; (6) human Muc-1; (7) human Muc-1; (8) human Muc-1; (9) human Muc-1; (1) human Muc-1; (1) human Muc-1; (2) human macrophage-derived chemokine (MDC) and human Muc-1; (1) human Muc-1; (2) human Muc-1; (3) human Muc-1; (4) human macrophage-derived and HIV gpl20; (7) human MDC and HIV gpl20; and (8) human SPF-1 and HIV gpl20; (7) human MDC and nucleotide sequences encoding them, can be used for producing an immune response, e.g. an effector T cell immune preventing HIV infection. The fusion proteins and/or nucleotide sequences can be used in in vitro diagnostic assays, as well as in screening assays for identifying unknown tumour antigen epitopes and fine mapping of tumour antigen epitopes. The present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New fusion polypeptides comprising a chemokine and a tumour antigen or HIV antigen, used for treating cancers or treating or preventing HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                   tumour; viral; antigen; fusion protein; cancer; vaccine;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 388; DB 20;
Pred. No. 5.4e-40;
1; Mismatches 0;
                                                                                                                                 Human MDC and HIV-1 gp120 fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                          (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 50; Page 130-131; 142pp; English.
                                                                                                                                                                                                                     Homo sapiens.
Human immunodeficiency virus type 1.
                               AAY29900 standard; Protein; 587 AA.
                                                                                                                                                                               Immune response; HIV; infection
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98.6%;
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                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Biragyn A;
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69; Conserv
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Best Local S.
Matches 69
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              AAY29900
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to polymer-modified bloactive synthetic chemokines and to methods for their production and use. The compounds and methods of the backbone of the invention are useful in the analysis and treatment of various diseases states e.g. HIV and AIDS related disorders, asthma, allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ transplant rejection, and rheumatoid arthritis. This sequence represents the human chemokine MDC protein of the invention.
                                                                            Human; chemokine; anti-HIV; antiasthmatic; antiarthritic; antirheumatic; antiarteriosclerotic; dermatological; antiinflammatory; antiallergic; immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV; AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis; atheroma; atherosclerosis; organ transplant rejection; MDC.
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                                                                                                                                                                                                                                                                                                                                                                                                         New polymer-modified bloactive synthetic chemokines useful in treatment of various diseases or disorders e.g. asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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100.0%; Pred. No. 9.2e-41;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                 Chen
                                                                                                                                                                                                                                                                                                                                                 Bradburne JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Fig 10C; 176pp; English.
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                                                                                                                                                                                                                                                              12-JUL-2001; 2001WO-US21933.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein;
                                                                                                                                                                                                                                                                                         12-JUL-2000; 2000US-217683P.
                                                       Human chemokine MDC protein.
                                                                                                                                                                                                                                                                                                                                                   Botti P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70
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                                                                                                                                                                                                                                                                                                                       (GRYP-) GRYPHON SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best_Local Similarity
Matches 69, Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KMILNKLSQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69 AA;
                                                                                                                                                                                                                                                                                                                                                   Kochendoerfer G,
                                                                                                                                                                                                      WO200204015-A1
                                                                                                                                                                          Homo sapiens.
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RESULT 7

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Best Local Similarity 100.
Matches 69; Conservative
                                                                                Hedrick JA,
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                                                            (SCHE ) SCHERING CORP
                                                                                                                                                                                                                                                                                                                                                                              62 KMILNKLSQ 70
                                                                                                  WPI; 1998-207387/18.
                                                                                                                                                                                                                                                                           86 AA;
                                                                                                              N-PSDB; AAV34996
                                        10-SEP-1996;
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07-JUN-1995;
 19-MAR-1998
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                                                                                Sorman DM,
                                                                                                                                                                                                                                                                            Sequence
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                                                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                           1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWW 60
                                                                                                                                                                               Chemokine receptor modulator useful for treating e.g. asthma, allergic rhinitis comprises a chemically modified carboxyl-terminus and/or amino terminus analogs .
                                                                                                                                                                                                                                          The present invention relates to chemokine receptor modulators, which comprise a chemokine polypeptide chain modified at N-terminus with an aliphatic chain and at least one amino acid derivatives and/or modified at its C-terminus with an aliphatic chain or polycyclic. The modulators can be used to treat diseases such as HIV infection, AIDS, asthma, allergic rhinitis, atopic dermatitis, atheroma, atherosclerosis, organ transplant rejection and rheumatoid arthritis. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chemokine; human; detection; forensic; diagnostic; treatment; cancer; degenerative condition; abnormal proliferation; regeneration;
                                                                                                                                                                                                                                                                                                                                                                              Gaps
atherosclerosis; organ transplant rejection; rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                        99.0%; Score 386; DB 23; Length 69; 100.0%; Pred. No. 9.2e-41; live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human chemokine protein 331D5 from CD1a+ cDNA library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "partial signal sequence"
16.86
/label= chemokine protein 331D5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                          Hartley O;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW59432 standard; Protein; 86 AA.
                                                                                                                                                                                                                        Example 3; Fig 2; 86pp; English.
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/label= signal
                                                                               12-JUL-2001; 2001WO-US21934.
                                                                                                  12-JUL-2000; 2000US-217683P.
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                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                          Gaertner H,
                                                                                                                                                                                                                                                                                                                 the human MDC protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                degeneration; atrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    62' KMILNKLSQ 70
                                                                                                                                                             WPI; 2002-171703/22.
                                                                                                                     (GRYP-) GRYPHON SCI
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69; Conserv
                                                                                                                                                                                                                                                                                                                                      69 AA;
                                       WO200204499-A1
                     Homo sapiens.
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                                                           17-JAN-2002
                                                                                                                                         Offord R,
                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW59432;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      been isolated from a 90 per cent CDIa+ cDNA library and obtained by random sequencing. Nucleic acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be used in diagnostics. The chemokines themselves are useful. for treatment of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by
                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents a novel human chemokine protein, 331D5 which has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                               Mammalian CC and CXC chemokines - useful for treatment of, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.0%; Score 386; DB 19;
100.0%; Pred. No. 1.2e-40;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        wound healing; angiogenesis; inflammation.
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/label= sig_peptide
25..93
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/label= mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                       Zlotník A;
                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 75; 82pp; English.
                                                                                                                                                                                                                                                                                                                    cancer and degenerative conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW20058 standard; Protein; 93 AA.
96US-0025724
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95US-0479620.
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treat HIV infection or other viral or bacterial pathogens infecting T-cells, macrophages or other immune system cells
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                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW59433 standard; Protein; 93 AA.
                                    English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1..24
/label- signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human chemokine protein 331D5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96US-0025724.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                    Claim 1; Fig 2A-F; 96pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SCHE ) SCHERING CORP
                                                                                                                                                                                                                                                                                                                                                     62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-207387/18.
N-PSDB; AAV34997.
                                                                                                                                                                                                                                     93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9811226-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-AUG-1998
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                                                                                                                                                                                                                                       Sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW59433;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Protein
                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
AAW59433
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                                                                                                                                                                                                                                                                                                                                                                            Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection; inhibitory compound; assay; reduce; circulatory system STCP-1 level; joint inflammation; rheumatoid arthritis; lupus.
                                                                                                                                                   A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human STCP-1 polypeptides with chemokine activity - useful e.g. to
                                                                                   Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat Crohn's disease, rheumatoid arthritis, etc.
                                                                                                                                                                                                                                                                                                                               Length 93;
                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                               Ouery Match 99.0%; Score 386; DB 18; Best Local Similarity 100.0%; Pred. No. 1.3e-40; Matches 69; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amino acid sequence of human STCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW62783 standard; Protein; 93 AA.
                                                                                                                                  Claim 1; Page 73; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-0760127
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                                                                                                                                                                                                                                                                                                                                                                                                                         62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                        Andrew DP, Chang M;
                          Godiska R, Gray PW;
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N-PSDB; AAV38933.
                                                   WPI; 1997-052324/05.
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      (ICOS-) ICOS CORP
                                                                                                                                                                                                                                                                                                           93 AA;
                                                             N-PSDB; AAT76529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW62783;
                                                                                                                                                                                                                                                                                                            Seguence
                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
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The present sequence represents human STCP-1. STCP-1 polypeptides are useful demonstrate chemokine activity for T-cells. The polypeptides are useful prophylactically or therapeutically to treat HIV infection and other conditions associated with viral/bacterial pathogens infecting T-cells. The conditions associated with viral/bacterial pathogens infecting T-cells. They can be included controphages or other immune system cells. They can be included corrier and optionally other pharmaceuticals (e.g. AZT, antiblotics etc.) in therapeutic compositions for treating these conditions. STCP-1 also useful to assay for inhibitory compounds used to reduce circulatory system STCP-1 levels to alleviate e.g. joint inflammation associated with rhemmatoid arthritis, lupus or other autoinmune diseases. The polypeptides are also useful to produce hybridisation probes to test for STCP-1 DNA/RNA in mammalian samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25 GPYGANMEDSVCCRDYVRYRLPLRYVYKHFYMTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chemokine; human; detection; forensic; diagnostic; treatment; cancer; degenerative condition; abnormal proliferation; regeneration; degeneration; atrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 93;
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99.0%; Score 386; DB 19;
Best Local Similarity 100.0%; Pred. No. 1.3e-40;
Matches 69; Conservative 0; Mismatches 0;
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/label= 331D5
/note= "chemokine protein"
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Devico AL,
                                                                                                                                                                                                                                       AAY26175;
                                                        Sequence
                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                              Peptide
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Matches
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                                            This sequence represents a novel human chemokine protein, 331D5. Would-late acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be used in diagnostics. The chemokines themselves are useful for treatment
                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                              Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy; arthritis; inflammatory disorder; cancer; Crohn's disease;
                                                                                                                                                              Gaps
                                                                                 of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by the inventive
                                                                                                                                                                              2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                                                                                                                                                                         This sequence represents the macrophage-derived chemokine (MDC). This protein is used to produce the antibodies of the invention. The antibodies are useful for purifying MDC polypeptides, for detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antibodies specific for macrophage-derived chemokine - useful for purifying or detecting the chemokine or modulating its activity

    useful for treatment of, e.g.

                                                                                                                                           Length 93;
                                                                                                                                         99.0%; Score 386; DB 19;
100:0%; Pred. No. 1.3e-40;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "leader peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                          "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 3; Column 21-24; 22pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
         cancer and degenerative conditions
                                                                                                                                                                                                                                                                                    AAW40811 standard; Protein; 93 AA.
Mammalian CC and CXC chemokines
                                                                                                                                                                                                                                                                                                                                           Macrophage:derived chemokine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-0480449
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                                                                                                                                                              Conservative
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/note=
                                                                                                                                                                                                                   62 KMILNKLSQ 70
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N-PSDB; AAT99233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gray PW;
                                                                                                                                                  Best Local Similarity
Matches 69; Conserv
                                                                                                                                                                                                                               KMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ICOS-) ICOS CORP.
                           Claim 1; Page 78;
                                                                                                                        AA;
                                                                                                                                                                                                                                                                                                                                                                                 atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUN-1995;
                                                                                                                        93
                                                                                                     compositions
                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US5688927-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Godiska R,
                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                      AAW40811;
                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein
                                                                                                                                                                                                                                                                 RESULT 13
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endogenous MDC in a host, and for modulating binding of MDC to its receptors. The DNA encoding this sequence can be used for identifying and isolating non-human MDC homologues. The MDC protein is potentially useful for treating inflammatory disorders, cancer, etc. Antagonists of MDC can be used for treating Crohn's disease, arthritis, atherosclerosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is macrophage-derived chemokine. This belongs to the CC class of chemokines. The efficacy of a vaccine is enhanced by combining it with one or more chemokines to enhance the immune response to an antigen. This can be humoral or cell-mediated immune response. The purified chemokines, fragments, derivatives or analogues are administered either concurrently with one or more purified antigens against which an immune response is desired or within a time period either before or after antigen administration. The chemokine gene is sisolated by PCK, and administered by constructing an expression plasmid vector which can be expressed in a coordinated manner upon introduction in a suitable cell. The vaccines are immunostimulatory and can be used
                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                     84
                                                                                                                                                                                                                                                                                                                                                                                                           2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         humoral response; cell-mediated response; PCR; immunostimulatory; expression plasmid vector.
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                                                                                                                                                                                                                                                   Length 93;
                                                                                                                                                                                                                                                   Score 386; DB 19;
Pred. No. 1.3e-40;
0; Mismatches 0;
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/note= "signal peptide"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY26175 standard; Protein; 93 AA.
                                                                                                                                                                                                                                                   / Match 99.0%; So
Local Similarity 100.0%; Procal Similarity 00.0%; Procas 69; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Macrophage-derived chemokine
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/note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 KMILNKLSQ 70
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KMILNKLSQ
                                                                                                                                                                                            AA;
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                                                                                                                        25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                              Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
                                                                                                         2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                                                        Length 93;
                                                                                 Indels
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                                                   Query Match
99.0%; Score 386; DB 20;
Best Local Similarity 100.0%; Pred. No. 1.3e-40;
Matches 69; Conservative 0; Mismatches 0;
to treat microbial diseases especially HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 2; Column 41-43; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                     Human macrophage derived chemokine.
                                                                                                                                                                                                                                                       AAY24414 standard; Protein; 93 AA.
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/label= signal
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95US-0479620.
95US-0558658.
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/label= MDC
                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                           62 KMILNKLSQ 70
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N-PSDB; AAX90162.
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                             93 AA;
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07-JUN-1995;
16-NOV-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                           Sequence
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                                                                   2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                  Gaps
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   Length 93;
99.0%; Score 386; DB 20;
100.0%; Pred. No. 1.3e-40;
ive 0; Mismatches 0;
                                  Conservative
                                                                                                                                     62 KMILNKLSQ 70
                                                                                                                                                        Query Match
Best Local Similarity
Matches 69; Conserv
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Sequence 1, Sequence 1, Sequence 18, Sequence 7, Sequence 13, Sequence 13, Sequence 40,
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                                                                                                                                                                                                                                                                                                                          Sequence 30, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CARREPONDENCE ADDRESS:
ADDRESSED: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 6060-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPOTER: IBM PC compatible
COMPATIBLE STATEM: PC-DOS/MS-DOS
SOCTWARE: PAPELICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2;
         US-08-836-922-1

US-09-141-833-1

US-09-141-833-1

US-08-836-922-4

US-08-716-188-7

US-08-316-837-13

US-08-375-346A-5

US-08-375-346A-5

US-08-375-346A-5

US-08-608-21

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US-08-608-21

US-08-608-21

US-08-608-21
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US-08-936-772-3
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CLASSIFICATION 514
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995.
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTONREY,FAGENT INFORMATION:
REGISTRATION NUMBER: 38,153
REGISTRATION NUMBER: 38,153
REGISTRATION NUMBER: 38,153
FELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAN: 312/474-6300
                                                                                                                                                                                                                                                              ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 390;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: peptide
 amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                  US-08-660-542-30
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Query Match
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350.133 Million cell updates/sec
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Sequence 32,
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Sequence 11,
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Sequence 6,
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Sequence 26,
                                                                                                                                        US-09-509-165A-30
390
1 LGFYGANMEDSVCCRDYVRY......EICADPRVPWVKMILNKLSQ 70
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Sequence
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Sequence
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PcTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PcTUS_COMB.pep:*
            GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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US-09-230-637-26
US-08-208-339A-4
US-08-722-719-6
US-09-334-951-65
US-09-334-951-65
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US-08-936-387-18
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Maximum Match 100%
Listing first 45 summaries

    protein search, using sw model

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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length
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Perfect score:
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No.
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us-09-509-165a-30.rai

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RESULT 4
US-09-232-878-6
US-09-232-878-6
Sequence 6, Application US/09232878
Fatent No. 624532
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Rottman, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijan
TITLE OF INVENTION: Wodulation of Systemic Memory T cell Trafficking
FILE REPERENCE: SUN-110PRV
CURRENT PILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 6
             MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE ANALOGS
                                                                                     ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 99.0%; Score 386; DB 2; I
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0;
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                                                                                                                                              STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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APPLICATION NUMBER: 08/558,65;
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,62;
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: GASS, DAVIA A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
           TITLE OF INVENTION: MACR
TITLE OF INVENTION: ANAL
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: MATSHAII, O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; MOLECULE TYPE: protein US-08-660-542-2
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                                                                                                                          Chicago
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TOPOLOGY:
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                                                         1 LGPYGANMEDSVCCRDYVRYRLPLRVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW
                             0; Gaps
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Petent No. 5688927
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS: ADDRESS: ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,449
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: GASS, DAVID A:
REGISTRATION NUMBER: 27866/32779
Best Local Similarity 100.0%; Pred. No. 2.1e-43; Matches 70; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ch 99.0%; Score 386; DB 1; I
I Similarity 100.0%; Pred. No. 9.6e-43;
69; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
IP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/WS-DOS
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Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
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Gray, Patrick W.
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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MOLECULE TYPE: protein
                                                                                                                                    61 VKMILNKLSQ 70
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Matches 69; Conserve
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                                                                                                            2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
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Batent No. 6220023

GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TILLE OF INVENTYON: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STRRET: 6300 Sears Tower, 233 South Wacker Drive
                                    Length 93;
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                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,603
                                   Query Match 99.0%; Score 386; DB 4; I
Best Local Similarity 100.0%; Pred. No. 9.6e-43;
Matches 69; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 27866/32780
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 530
                                                                                                                                                                                                          62 KMILNKLSQ 70
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Best Local Similarity
Matches 69; Conserva
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US-09-232-878-6
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2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 31, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago STATE: 111nois COUNTRY: United Act.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.0%; Score 386; DB 5; I
100.0%; Pred. No. 9.6e-43;
Live 0; Mismatches 0;
                                                                                 ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART & OLSTEIN STEEZE: 6 BECKER FARM ROAD CITY: ROSELAND STATE: NEW JERSEY
LI, ET AL.
PENTION: Human Chemokine Beta-13
                                                                                                                                                                                                                                                                                                                SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07294
FILING DATE: June 6, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: United States of America ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                   MEDIUM TYPE: 3.5 INCH DISKETTE COMPUTER: IBM PS/2 OPERATING SYSTEM: MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/464,594
FILING DATE: June 5, 1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0
Matches 69; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93 AMINO ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: PROTEIN
                         TITLE OF INVENTION: HUNDMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LINEAR
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                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS
                                                                                                                                                                                         COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-660-542-31
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2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
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APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
                                                                                                                                                                                                                                                                                                                                                       Score 362; DB 2; Length 69;
Pred. No. 8.6e-40;
3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION DATA:
                                                             27866/33318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 25, Application US/08660542; Patent No. 5932703; GENERAL INFORMATION:
                 NAME: Gass, David A.
REGISTRATION NUMBER: 278
REFERENCE/DOCKET NUMBER: 278
TELECOMMUNICATION INFORMATION:
TELERONE: 312/474-6300
TELERAX: 312/474-6448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CARRACTERISTICS:
LENGTH: 69 aming acids
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                         38,153
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                                                                                                                                                                                                                                                                                                                                                         92.8%;
94.2%;
ATTORNEY/AGENT INFORMATION:
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Best Local Similarity 94.29
Matches 65; Conservative
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93 amino acids
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                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                          , MOLECULE TYPE: peptide US-08-660-542-32
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CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear
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Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95.9%; Score 374; DB 2; Length 69; 97.1%; Pred. No. 2.4e-41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Mismatches
                                                                             CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16 NOV-1995
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY FAGENT INFORMATION:
NAME: GASS, DAT 46
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Chicago
STATE: 111inois
COUNTX: United States of America
IP: 60606-6402
                                         US/08/660,542
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FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                        31:
                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 97.17
Matches 67; Conservative
                   CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                            312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: peptide
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CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 KMILNKLSQ 70
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
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                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-660-542-32
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13 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 68
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APPLICANT: Hardwick, J. Marie
APPLICANT: Reitz, Marvin
TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
TITLE OF INVENTION: Associated Herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39.2%; Score 153; DB 4; Length 95;
42.9%; Pred. No. 1.4e-12;
iive 17; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT ; ORGANISM: Kaposi's sarcoma-associated herpes-like virus US-09-230-637-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4. Application US/08208339A
Patent No. 5504003
GENERAL INFORMATION:
APPLICANT: LI, ET AL.
TITLE OF INVENTION: Macrophage Inflammatory Protein
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, SFEWART 6 OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                             FILE REFERENCE: 1107.78372.

CURRENT APPLICATION NUMBER: US/09/230,637

CURRENT FILING DATE: 1999-11-23

PRIOR APPLICATION NUMBER: 60/022,591

PRIOR FILING DATE: 1996-07-25

PRIOR APPLICATION NUMBER: PCT US 97/12931

PRIOR FILING DATE: 1997-07-24

NUMBER OF SEQ ID NOS: 62

SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/208,339A
FILING DATE: 8 MARCH 1994
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION TELEPHONE: 201-994-1700
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 89 AMINO ACIDS TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201-994-1744
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TOPOLOGY: LINEAR
MOLECULE TYPE: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: ROSELAND
STATE: NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07068
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 26
LENGTH: 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
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                                                                                                                                                                                                                                             /note "The amino acid at position 24 is selected from the
                                                                                                                                                                                                                                                                 group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note-"The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note-"The amino acid at position 30 is independently selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arguine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 87.7%; Score 342; DB 2; Length 93; Best Local Similarity 91.3%; Pred. No. 4.7e-37; Matches 63; Conservative 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and methionine."
                                                                                                                                                                                                                                                                                                                                                                and methionine.
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                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
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                                                                     MOLECULE TYPE: peptide
                           single
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APPLICANT: Hayward, Gary
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OTHER INFORWATION:
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                                                                                                                NAME/KEY: Protein LOCATION: 1..69 FEATURE:
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INFORMATION:
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INFORMATION:
                                                                                                                                                                                                                    INFORMATION:
                   STRANDEDNESS: Sir
TOPOLOGY: linear
    amino acid
                                                                                                                                                                                             NAME/KEY:
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5 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI 64
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APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: Myelold Progenitor Inhibitory Factor-1 (MPIF-1)
TITLE OF INVENTION: Polynucleotides and Polypeptides (As Amended)
FILE REFERENCE: 1488.033000B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Wyeloid Progenitor Inhibitory Factor-1 (MPIF-TITLE OF INVENTION: Polynucleotides and Polypeptides (As Amended)
TITLE OF INVENTION: Polynucleotides and Polypeptides (As Amended)
TITLE REPERENCE: 1488.033000B
CURRENT APPLICATION NUMBER: US/09/334,951
CURRENT FILING DATE: 1999-06-17
EARLIER APPLICATION NUMBER: US 08/208,339
EARLIER FILING DATE: 1999-03-08
EARLIER APPLICATION NUMBER: US 08/446,881
EARLIER FILING DATE: 1995-05-05
EARLIER FILING DATE: 1995-05-05
                                  Length 89;
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                                                                                                           Indels
                          37.2%; Score 145; DB 3;
40.6%; Pred. No. 1.4e-11;
11ve 14; Mismatches 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT PELICATION NUMBER: US/09/334,951
CURRENT FILING DATE: 1990-06-17
EARLIER APPLICATION NUMBER: US 08/208,339
EARLIER APPLICATION NUMBER: US 08/46,881
EARLIER FILING DATE: 1994-03-08
EARLIER PILING DATE: 1995-05-05
EARLIER PELING DATE: 1995-06-06
EARLIER APPLICATION NUMBER: US 08/468,775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 65, Application US/09334951
Patent No. 6451562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-334-951-6
; Sequence 6, Application US/09334951
; Patent No. 6451562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EARLIER FILING DATE: 1996-09-30 NUMBER OF SEQ ID NOS: 65
                                                                                                   26; Conservative
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APPLICANT: Ruben, Steven M.
APPLICANT: Li, Hacdong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
US-09-334-951-65
                          Query Match
Best Local Similarity
Matches 26; Conserv
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ISDL 66
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82 ISDL 85
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APPLICANT: RUBIN, STEVEN M.
APPLICANT: LI, HAODONG
APPLICANT: LI, HAODONG
APPLICANT: ADAMS, MARK D.
TITLE OF INVENTION: THERAPEUTIC COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: TREATING DISEASE STATES WITH MYELOID PROGENITOR INHIBITORY
TITLE OF INVENTION: FACTOR-1 (MPIF-1), MONCEYTE COLONY INHIBITORY FACTOR
TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
CORRESPONDENCE ADDRESS:
                                                                                                                                             5 GANMEDSYCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI 64
                                                                                                                                                                                        Length 89;
                                                                                    22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CMPUTER: Filey guisk
CMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOGTWARE: Datentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/722,719
FILING DATE: 30-SEP-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,209
FRILNG DATE: 22-DEC.1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/208,339
FILING DATE: 08-MAR.1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/46,881
FILING DATE: 05-MAY-1995
PRIOR APPLICATION DAMBER: US 08/46,682
FILING DATE: 06-JUN-1995
PRIOR APPLICATION DAMBER: US 08/465,682
FILING DATE: 06-JUN-1995
PRIOR APPLICATION NUMBER: US 08/465,682
FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    * 1100 NEW YORK AVENUE, N.W., SUITE 600 WASHINGTON
   37.2%; Score 145; DB 1; 40.6%; Pred. No. 1.4e-11;
                                                                                14; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6, Application US/08722719
Patent No. 6001606
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INFORMATION FOR SEQ ID NO: 6
SEQUENCE CHARACTERISTICS:
                                                                        26; Conservative
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Query Match
Best Local Similarity
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ZIP: 20005-3934
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82 ISDL 85
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US-08-722-719-6
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Search completed: July 28, 2003, 04:05:36 Job time: 5.88235 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Coleman, Roger
APPLICANT: Wilde, Craig G.
APPLICANT: Wilde, Craig G.
APPLICANT: Seilhamer, Jeffrey J.
TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
TITLE OF INVENTION: ITS PRODUCTION AND USES
TITLE OF INVENTION: ITS PRODUCTION AND USES
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3330 HILLVIEW AVENUE
CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                      36.7%; Score 143; DB 4; Length 89; 40.6%; Pred. No. 2.5e-11; tive 14; Mismatches 22; Indels
EARLIER FILING DATE: 1995-06-06
EARLIER APPLICATION NUMBER: US 08/468,775
EARLIER FILING DATE: 1995-06-06
EARLIER FILING DATE: 1996-09
NUMBER OF SEQ ID NOS: 65
SOUTHARE: Patentin Ver. 2.0
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/375,346A
FILING DATE: 19-JAN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 6, Application US/08375346A Patent No. 5605817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: LUTHER, BARBARA J.
REGISTRATION NUMBER: 33,954
REFERENCE/DOCKET NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 855-0555
TELEFAX: (415) 855-0572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
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Best Local Similarity 40.6%
Matches 26; Conservative
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LENGTH: 78 amino acids
TYPE: amino acid
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MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-951-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Coleman
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82 ISDL 85
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                                                                                                  Query Match 36.2%; Score 141; DB 1; Length 78; Best Local Similarity 43.1%; Pred. No. 3.9e-11; Matches 25; Conservative 12; Mismatches 19; Indels
; FRAGMENT TYPE: internal; ORIGINAL SOURCE:
US-08-375-346A-6
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1 LGPYGANMEDSVCCRDYVRY .......EICADPRVPWVKMILNKLSQ 70
                                                                                                                                  July 28, 2003, 04:04:49 ; Search time 9.55882 Seconds
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
                                                                                   OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                        Sequence:
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                                                                                                                                     Run on:
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/cgn2\_6/ptodata/2/pubpaa/US07\_NEW\_PUB.pep: /cgn2\_6/ptodata/2/pubpaa/PCT\_NEW\_PUB.pep:\*

Published\_Applications\_AA:\*

Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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	Score	Query Match	Duery Match Length DB	DB	ΩI	Description
1	305	000	0.2		3-344-60-00-511	
	200	0.00	7	7	0-04*-/50-60-60	seducince o, Applit
•	386	99.0	93	11	US-09-811-088-2	Sequence 2, Appli
	386	0.66	. 93	15	US-10-314-410-2	Sequence 2, Appli
	381	97.7	93	10	US-09-908-599-2	2.7
	381	97.7	93	12	US-09-908-600-2	2, 1
	268	68.7	68	15	US-10-001-221A-3	Sequence 3, Appli
	214.5	55.0	67	15	US-10-001-221A-7	7
	213	54.6	37	10	US-09-864-761-43730	43
	153	39.5	71	10	US-09-144-838-3	
	152	39.0	7.8	15	US-10-001-221A-6	Ġ
	145	37.2	69	11	US-09-792-793A-28	28,
	145	37.2	83	10	US-09-334-923A-6	6. A
	145	37.2	88	10	US-09-334-954A-6	Sequence 6, Appli
	145	37.2	97	10	US-09-925-302-792	792
	144	36.9	73	10	US-09-144-838-6	Sequence 6, Appli
	143	36.7	70	10	US-09-334-923A-65	65

RESULT 2 US-09-811-088-2

Sequence 65, Appl Sequence 34, Appl Sequence 34, Appl Sequence 37, Appl Sequence 5, Appl Sequence 10, Appl Sequence 11, Appl Sequence 21, Appl Sequence 21, Appl Sequence 29, Appl Sequence 29, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 2, Appl Sequence 2, Appl Sequence 2, Appl Sequence 2, Appl Sequence 1, Appl Sequence 3, Appl Sequence 1, Appl Sequence 3, Appl Sequence 5, A	rddw 'cc annanhae
10 US-09-334-954A-65 US-10-188-366-6 US-09-834-795A-34 10 US-09-834-795A-34 10 US-09-144-838-5 11 US-09-144-838-41 10 US-09-144-838-42 11 US-09-195-457-11 11 US-09-195-457-11 12 US-09-195-457-11 13 US-08-927-939-21 14 US-09-920-137A-8 12 US-09-920-137A-8 12 US-09-920-137A-8 12 US-09-920-137A-8 12 US-09-920-137A-8 12 US-09-920-137A-8 12 US-09-920-137A-8 13 US-09-920-137A-8 14 US-09-920-137A-8 15 US-10-158-366-5 15 US-10-158-366-5 15 US-10-158-366-5 15 US-10-158-366-5 15 US-10-158-358-24 16 US-09-151-450-3 17 US-09-151-450-3 18 US-08-927-939-19 19 US-08-927-939-19 10 US-09-334-923A-53	2
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### ALIGNMENTS

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Gaps
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          Sequence 6, Application US/09837446

Patent No. US20020019341A1

GENERAL INFORMATION:
APPLICANT: Butcher, Eugene C.
APPLICANT: Rottman, James J.
APPLICANT: Rottman, James B.
APPLICANT: Wu', Lijan Modulation of Systemic Memory T Cell;
TITLE OF INVENTION: Trafficking;
FILE REFERENCE: STAN-110CON
CURRENT APPLICATION NUMBER: US/09/837,446
CURRENT FILING DATE: 2001-04-17
PRIOR APPLICATION NUMBER: 09/232,878
PRIOR FILING DATE: 1999-01-15
NUMBER OF SED ID NOS: 6
NUMBER OF SED ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
99.0%; Score 386; DB 10;
Best Local Similarity 100.0%; Pred. No. 8.1e-40;
Matches 69; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: H. sapiens
US-09-837-446-6
US-09-837-446-6
                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 6
LENGTH: 93
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25 GPYGANMEDSVCCRDYVRHRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWW 84
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Pred. No. 3.3e-39;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                            DB 15; Length 93;
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                                                                                                                                                                                                                                                                                                         Query Match 99.0%; Score 386; DB 15; Best Local Similarity 100.0%; Pred. No. 8.1e-40; Matches 69; Conservative 0; Mismatches 0;
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Patent No. US2002009845A1
GENERAL INFORMATION:
APPLICANT: LI, HAODONG
TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: HUMAN GENOME SCIENCES, INC. STREET: 9410 KEY WEST AVENUE CITY: ROCKVILLE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: L1, Hoodong et al.
TITLE OF INVENTION: Human Chemokine Beta 13
FILE REFERENCE: PF177P3
CURRENT APPLICATION NUMBER: US/09/908,599
CURRENT FILING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: 09/432,768
PRIOR PILING DATE: 1999-11-03
                                             PRIOR APPLICATION NUMBER: US 08/938,365
PRIOR FILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 93
  PRIOR APPLICATION NUMBER: US 09/354,809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/032,432 PRIOR FILING DATE: 1996-12-05 NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-908-599-2
Sequence 2, Application US/09908599
Parent No. US20020055147A1
GENERAL INFORMATION:
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98.68;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68; Conservative
                                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens US-10-314-410-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens
US-09-908-599-2
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Best Local $
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                                                                                                            APPLICANT: Pan, Yang
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: PROGNASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
TITLE OF INVENTION: USES
FILE REFERENCE: 07334-324001
CURRENT APPLICATION NUMBER: US 09/712,726
PRIOR PILING DATE: 2000-11-14
PRIOR APPLICATION NUMBER: US 08/820,364
PRIOR FILING DATE: 1997-03-12
PRIOR PLICATION NUMBER: US 09/757,421
PRIOR PLICATION NUMBER: US 08/83,652
PRIOR PLICATION NUMBER: US 08/843,652
PRIOR PLICATION NUMBER: US 08/843,651
PRIOR PLING DATE: 1997-04-16
PRIOR PLING DATE: 1997-04-16
PRIOR PLING DATE: 1997-04-16
PRIOR PLING DATE: 1999-07-16
PRIOR PLING DATE: 1999-07-16
PRIOR PLING DATE: 1999-07-16
PRIOR PLING DATE: 1999-07-16
PRIOR FILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
SOFTHARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: HOLIZMANION;
APPLICANT: HOLIZMANION;
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: UGES
TITLE OF INVENTION: UGES
TITLE OF INVENTION: UGES
CURRENT APPLICATION NUMBER: US/10/314,410
CURRENT APPLICATION NUMBER: US/09/811,088
PRIOR REPLICATION NUMBER: US 09/712,726
PRIOR APPLICATION NUMBER: US 09/712,726
PRIOR APPLICATION NUMBER: US 09/712,726
PRIOR APPLICATION NUMBER: US 09/757,421
PRIOR FILING DATE: 1997-03-12
PRIOR APPLICATION NUMBER: US 08/843,652
PRIOR APPLICATION NUMBER: US 08/843,651
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
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I Similarity 100.0%; Pred. No. 8.1e-40;
69; Conservative 0; Mismatches 0;
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Sequence 2, Application US/09811088 Patent No. US20020160446A1
                                             GENERAL INFORMATION:
APPLICANT: Holtzman, Douglas A.
APPLICANT: Gearing, David P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 KMILNKLSQ 70
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US-09-811-088-2
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Best Local Similarity
Matches 69; Conserva
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GENERAL INFORMATION:
APPLICANT: Rank, David R.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica *A' 100/99/864,761
CURRENT APPLICATION NUMBER: US/09/864,761
                                                                                                             10 DSV-----CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI'64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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RILING DATE: 2000-10-04
RILING DATE: 2000-09-27
A APPLICATION NUMBER: PCT/US01/00666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00669
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 2000-02-04
APPLICATION NUMBER: US 60/207,456
FILING DATE: 2000-05-26
APPLICATION NUMBER: US 09/632,366
FILING DATE: 2000-08-03
APPLICATION NUMBER: GB 24263.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: PCT/US01/00664
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 43730, Application US/09864761 Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Chimeric molecule US-10-001-221A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 58.5%
Matches 38; Conservative
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61 KKLLHKLS 68
62 KMILNKLS 69
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63 LHKLS 67
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LENGTH: 67
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Sequence 3, Application US/20030108515A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Schall, Thomas J. Traibot, Bett Howard, Maureen
FILE REPERBNCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
PRIOR PILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 3: 5
LENGTH: 68
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 381; DB 10; Length 9
Pred. No. 3.3e-39;
1; Mismatches 0; Indels
                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARRE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/484,221
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                            MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97.78;
98.68;
                                                     COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 98.6'
Matches 68; Conservative
                COUNTRY: 20850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 44; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: HOI US-10-001-221A-3
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FACEUREAL INC. 025.022010837081

APPLICANT: McDonald, John R.
APPLICANT: Coggins, Philip
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMAGE
TITLE OF INVENTION: OTHER INFLAMMATORY CONDITIONS AND DISORDERS
FILE REFERENCE: 25020-601D
CURRENT APPLICATION NUMBER: US/09/792,793A
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 93
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 28
LENGTH 69
                                                                                                                                                                                                               Sequence 6, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Schall, Thomas J. Premack, Brett Howard, Maureen
TITLE OF INVERTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/14
TITLE OF INVERTION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
PRIOR APPLICATION NUMBER: 09/834,814
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GPYGANVEDSICCENVINKIPIQRESYTRITNIQCPKEAVIFKKTQRGKEVCADPKER 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 GPYGANMEDSVCCRDYVRYRLPL-RVVKHFYWTSDSCPRPGVVL-LTFRDKEICADPRVP
                                                CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 68
                                                                              12 CCYGFQQHPPPVQILKEMYPTSPACPKPGVILLTKRGRQICADPSKNWVRQLMORL 67
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US-09-792-793A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 69;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            39.0%; Score 152; DB 15;
40.8%; Pred. No. 2.6e-11;
tive 16; Mismatches 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Chimeric molecule US-10-001-221A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 28, Application US/09792793A ; Patent No. US20020168370A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial sequence
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Best Local Similarity 40.69
Matches 26; Conservative
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61 WVRDSMKHLDQ 71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
hes 29; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65 LNKL 68
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US-09-792-793A-28
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APPLICANT: Siani, Michael A.

APPLICANT: Siani, Michael A.

APPLICANT: Wilken, Jill

APPLICANT: Wilken, Stephen B.H.

TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
FILE REFERENCE: GREN 020/0/10S

CURRENT APPLICATION UNBER: US/09/144,838A

EARLIER FILING DATE: 1998-08-31

EARLIER FILING DATE: 1997-09-04

NUMBER OF SEQ ID NOS: 54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
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N: EXPRESSED IN LUNG, SIGNAL = 0.79

N: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73

N: EXPRESSED IN BRAIN, SIGNAL = 0.66

N: EXPRESSED IN BONE MARROW, SIGNAL = 0.7

N: EXPRESSED IN ADULT LIVER, SIGNAL = 0.7

N: EXT HUMAN HIT: W61220.1, EVALUE 8.50e-01

N: SWISSPROT HIT: 000626, EVALUE 3.00e-18
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PRIOR APPLICATION NUMBER: PCT/USO1/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/0068
PRIOR APPLICATION NUMBER: PCT/USO1/00663
PRIOR APPLICATION NUMBER: PCT/USO1/00663
PRIOR APPLICATION NUMBER: PCT/USO1/00662
PRIOR APPLICATION NUMBER: PCT/USO1/00662
PRIOR APPLICATION NUMBER: PCT/USO1/00661
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: PCT/USO1/0670
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR PILING DATE: 2000-09-21
PRIOR PLILING DATE: 2000-09-21
PRIOR PLILING DATE: 2000-09-30
PRIOR PLILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-30
PRIOR PLILING DATE: 2001-01-39
PRIOR FILING DATE: 2001-01-39
PRIOR PLILING DATE: 2001-01-39
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100.0%; Pred. No. 4.2e-19;
tive 0; Mismatches 0;
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39.2%; Score 153; DB 10;
Best Local Similarity 42.9%; Pred. No. 1.8e-11;
Matches 24; Conservative 17; Mismatches 15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: MAP TO AC004382.1
OTHER INFORMATION: EXPRESSED IN PLACE
OTHER INFORMATION: EXPRESSED IN LUNG,
OTHER INFORMATION: EXPRESSED IN FETAL
OTHER INFORMATION: EXPRESSED IN BRAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09144838A Patent No. US20020051996A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
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FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
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OTHER INFORMATION:
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OTHER INFORMATION:
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LENGTH: 71
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Sequence 6, Application US/09144838A

Sequence 6, Application US/09144838A

Patent No. US20020051996A1

GENERAL INFORMATION:

APPLICANT: Sianoi, Michael A.

APPLICANT: Sianoi, Reyna

APPLICANT: Sianoi, Reyna

APPLICANT: Stephen B.H.

TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation

FILE REFERENCE: GRNN-020/01US

CURRENT APPLICATION UNMER: US/09/144,838A

CURRENT PILING DATE: 1998-08-31

EARLIER PILING DATE: 1997-09-04

NUMBER OF SEQ ID NOS: 54

SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                              5 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI 64
                                                                                                                                                                                                         5 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI 64
                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 792, Application US/09925302

Patent No. US20020044941A1

GENERAL INFORMATION:

APPLICANT: ROSen et al.

TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies

FILE REFERRECE: PA104

CURRENT APPLICATION NUMBER: US/09/925,302

CURRENT FILING DATE: 2001-08-10

PRIOR FILING DATE: 2000-03-08

PRIOR FILING DATE: 1999-03-12

NUMBER OF SEQ ID NOS: 896

SOFTWARE: PATENTIN VET: 2.0

SEQ ID NO 792
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                                                                        Query Match 37.2%; Score 145; DB 10;
Best Local Similarity 40.6%; Pred. No. 2.2e-10;
Matches 26; Conservative 14; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 145; DB 10;
Pred. No. 2.4e-10;
14; Mismatches 22;
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ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match . 37.2%;
Best Local Similarity 40.6%;
Matches 26; Conservative 1
; ORGANISM: Homo sapiens US-09-334-954A-6
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US-09-925-302-792
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82 ISDL 85
                                                                                                                                                                                                                                                                                 65 LNKL 68
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90 ISDL 93
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US-09-925-302-792
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US-09-144-838-6
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TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As Amende
FILE REFERENCE: 1489 0.33000 D
CURRENT APPLICATION NUMBER: US/09/334,923A
CURRENT FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: US 08/446,881
PRIOR FILING DATE: 1995-06-06
PRIOR APPLICATION NUMBER: US 08/468,775
PRIOR FILING DATE: 1995-06-06
PRIOR APPLICATION NUMBER: US 08/722,719
PRIOR FILING DATE: 1996-09-30
NUMBER OF SEQ. DID NOS: 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Ruben, Steven M.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynucleotides
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynucleotides
TITLE REPERENCE: 1488.033000C
CURRENT APPLICATION NUMBER: US/09/334,954A
CURRENT FILING DATE: 1999-06-17
PRIOR FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: US 08/46,881
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR APPLICATION NUMBER: US 08/465,775
PRIOR APPLICATION NUMBER: US 08/468,775
PRIOR APPLICATION NUMBER: US 08/22,719
PRIOR APPLICATION NUMBER: US 08/22,719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI 64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37.2%; Score 145; DB 10; Length 89; 40.6%; Pred. No. 2.2e-10; Live 14; Mismatches 22; Indels
                                                                                                                                                Sequence 6, Application US/09334923A
Patent No. US20020061551A1
GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-334-954A-6
. Sequence 6. Application US/09334954A
. Patent No. US20020076746A1
. GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 6
LENGTH: 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 Similarity 40.69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-334-923A-6
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62 ISDL 65
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Best Local S
Matches 26
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; OTHER INFORMATION: Description of Artificial Sequence: Synthetic US-09-144-838-6

Gaps Length 73; Query Match 36.9%; Score 144; DB 10; Length 73 Best Local Similarity 44.6%; Pred. No. 2.3e-10; Matches 25; Conservative 12; Mismatches 19; Indels

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Search completed: July 28, 2003, 04:20:04 Job time: 9.55882 secs

Run on:

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US-08-55.
| Sequence 30, Application:
| Sequence 30, Application:
| Sequence 30, Application:
| APPLICANT: Gray, Patrick W. |
| APPLICANT: Gray, Patrick W. |
| APPLICANT: Raport, Carol J. |
| TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND |
| TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND |
| TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND |
| TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE MDC: |
| TITLE OF INVENTION: MACROPHAGE DERIVE |
| TITLE OF IN
US-09-646-028-53

US-09-646-028-50

US-09-646-028-50

US-08-925-857-10

US-08-404-594-2

US-08-404-594-2

US-08-404-504-2

US-08-760-127-3

US-08-578-668-2

US-08-925-857-12

US-08-925-857-12

US-08-925-857-12

US-08-921-764-2

US-08-931-764-2

US-08-931-764-2

US-08-931-764-2

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US-09-67-447-2

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US-08-98-18-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-484-221-2
US-09-908-599-2
US-09-908-600-2
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APPLICATION NUMBER: US/08/939,107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
     FILING DATE:
     (without alignments)
562.075 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.
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                                                                                                                                                                                      July 28, 2003, 04:00:39; Search time 80.2941 Seconds
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/cgn2_6/ptodata/1/paa/US096_COMB.pep:
                              GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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US-09-067-447-30
US-09-067-447-30
US-09-067-447B-30
US-09-667-447B-30
US-09-646-028-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fotal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4569144 seqs, 644733110 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                     OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length
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390
390
388
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Result

2726, A Appli Appli

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Sequence 3, Sequence 6, 1 Sequence 2, 1 Sequence 2, 1 Sequence 2, 1

Sequence 1 Sequence 2

Sequence

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SEQUENCE 30, Application US/09067447A
SEQUENCE 30, Application US/09067447A
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACKOPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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Best Local Similarity 100.0%; Score 390; DB 14; Length 70;
Best Local Similarity 100.0%; Pred. No. 2e-41;
Matches 70; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                           Length 70;
                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 390; DB 14; Best Local Similarity 100.0%; Pred. No. 2e-41; Matches 70; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT APPLICATION NUMBER: US/09/067,447A
CURRENT FILING DATE: 1998-04-28
EARLIER FILING DATE: 1997-09-26
EARLIER APPLICATION NUMBER: 08/60,542
EARLIER FILING DATE: 1997-09-26
EARLIER FILING DATE: 1996-06-07
EARLIER FILING DATE: 1996-06-07
EARLIER PILING DATE: 1995-11-16
EARLIER APPLICATION NUMBER: 08/558,658
EARLIER FILING DATE: 1995-11-16
EARLIER FILING DATE: 1995-06-07
EARLIER FILING DATE: 1995-06-07
EARLIER FILING DATE: 1995-06-07
                     27866/34404
REGISTRATION NUMBER: 38,153
                     REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 30
                                                                                         TELEAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                    LENGIH: 70 amino acids
                                                                                                                                                                                                                               single
                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide
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                                                                                                                                                                                                                               STRANDEDNESS:
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Sequence 30, Application US/09067447

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

APPLICANT: Raport, Carol J.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND

TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT

NUMBER OF SEQUENCES: 44

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 70;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 390; DB 13; Best Local Similarity 100.0%; Pred. No. 2e-41; Matches 70; Conservative 0; Mismatches 0;
                                                                                                                                    REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: United States of America ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY AGENT INFORMATION:
NAME: Gass, David A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09/067,447
  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: GASS, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                    TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                          LENGTH: 70 amino acids
                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 VKMILNKLSQ 70
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                                                                                                                                                                                                                                                                                                                                  amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chicago
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-067-447-30
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SEQUENCE OF STATE OF INVENTION: METHODS AND COMPOSITIONS OF TILLE OF INVENTION: METHODS AND COMPOSITIONS OF TILLE REPERENCE: 14014.0316/P.

CURRENT APPLICATION NUMBER: US/09/646,028

CURRENT FILING DATE: 2000-09-12

PRIOR APPLICATION NUMBER: 60/077,745

PRIOR FILING DATE: 1998-03-12

RIOR FILING DATE: 1998-03-12

RIUMBER OF SEQ ID NOS: 57

SOFTWARE: FastER for Windows Version 3.0

SEQ ID NO 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Description of artificial sequence:/note-synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALÓGS, MDC TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION; Description of Artificial Sequence: Human MDC analog US-09-509-165A-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 390; DB 19; Best Local Similarity 100.0%; Pred. No. 2e-41; Matches 70; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 388; DB 20;
Pred. No. 9.7e-41;
1; Mismatches 0;
                          TITLE OF INVENTION:

FILE REPERENCE: 27866/34810

CURRENT APPLICATION NUMBER: US/09/509,165A

CURRENT FILING DATE: 2000-06-12

PRIOR APPLICATION NUMBER: 09/67,447

PRIOR FILING DATE: 1998-04-28

PRIOR FILING DATE: 1998-06-27

PRIOR PELING DATE: 1997-09-26

PRIOR PELING DATE: 1997-09-26

PRIOR PELING DATE: 1997-09-26

PRIOR FILING DATE: 1996-06-07

PRIOR FILING DATE: 1996-06-07

PRIOR FILING DATE: 1995-11-16

PRIOR FILING DATE: 1995-10-16

SEQ ID NO 30

LENGTH: 70

LENGTH: 70

LENGTH: 70

LENGTH: 70

LENGTH: 70
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98.6%;
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Best Local Similarity 98.69
Matches 69; Conservative
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                                                            APPLICANT: Gray, Patrick W.
APPLICANT: Chantry, David H.
APPLICANT: Chantry, David H.
APPLICANT: Decley, Michael C.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC
TITLE OF INVENTION: ACTIVITY
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
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                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 390; DB 14; Best Local Similarity 100.0%; Pred. No. 2e-41; Matches 70; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38,153
ER: 27866/34404
                                                                                                                                                                                                                                                                                                                        STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: 08/479,620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-509-165A-30
Sequence 30, Application US/09509165A
GENERAL INFORMATION:
                   Sequence 30, Application US/09067447B GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 70 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                      ADDALL.
STREET: 6300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-067-447B-30
                                                                                                                                                                                                                                                                                                                        STATE: Il
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ZIP: 94304-1104
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                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-09-646-028-53
                                                              APPLICANT: Kwak, Larry
APPLICANT: Birapy, Arry
APPLICANT: WETHODS AND COMPOSITIONS OF
TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
FILE REFERENCE: 14014, 0.316/P
CURRENT PAPLICATION NUMBER: 2000-09-12
PRIOR PILICANTION NUMBER: 60/077,745
PRIOR PILIGATION NUMBER: 60/077,745
NUMBER OF SEQ ID NOS: 57
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 50, Application US/09646028
GENERAL INFORMATION:
APPLICANT: Kwak, Larry
APPLICANT: Biragyn, Arya
TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 587;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 334;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 388; DB 20; Length 3
Pred. No. 2e-40;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 388; DB 20;
Pred. No. 3.7e-40;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 14014.0316/P
CURRENT APPLICATION NUMER: 15/09/646,028
CURRENT FILING DATE: 2000-09-12
PRIOR APPLICATION NUMBER: 60/077,745
PRIOR FILING DATE: 1998-03-12
NUMBER OF SEQ ID NOS: 57
SOFTWARE: FRSEEGO for Windows Version 3.0
                 Sequence 53, Application US/09646028 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99.5%;
                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
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Best Local Similarity 98.6%;
Matches 69; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 98.65
Matches 69; Conservative
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US-09-646-028-53
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LENGTH: 587
                                                                                                                                                                                                                                                                                  SOFTWARE: F
SEQ ID NO 53
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: GOTTMEN, Daniel M.
APPLICANT: Zlotnik, Albert
TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
NUMBER OF SEQUENCES:
ADDRESSEE: DNAX Research Institute
STREET: 901 California Avenue
CITY: Palo Alto
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                        Length 69;
                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                   TITLE OF INVENTION: BIOTINYLATED SYNTHETIC CHEMOKINES FILE REFERENCE: 29964/38772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                    99.0%; Score 386; DB 27;
100.0%; Pred. No. 6.4e-41;
Live 0; Mismatches 0;
                                                                                                          CURRENT APPLICATION NUMBER: US/60/412,866
CURRENT FILING DATE: 2002-09-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATENTIN VOS: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 60/025,724 FILING DATE: 10-SEP-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/925,857
FILING DATE: 09-SEP-1997
CLASSIFICATION: 436
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
Sequence 1, Application US/60412866
GENERAL INFORMATION:
APPLICANT: Demotz et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
TELEFAX: 650-496-1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Ching, Edwin P. REGISTRATION NUMBER: 34, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                        Query Match 99.09
Best Local Similarity 100.0
Matches 69; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
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Gaps

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2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Godiska, Ronald
PPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
CARRESPONDENCE ADDRESS:
AMARSHALL O'TOOLE, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                           99.0%; Score 386; DB 8; I
100.0%; Pred. No. 8.9e-41;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.0%; Score 386; DB 8; 100.0%; Pred. No. 8.9e-41;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32628
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELERX: -312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
                                      REGISTRATION NUMBER: 36,134
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-443
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1740
TELEFAX: 201-994-1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: United States of America 2IP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2, Application US/08479620 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                         ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D
                                                                                                                                                    TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
                                                                                                                                                                                                                                                                                                                                                                              Query Match 99.0%
Best Local Similarity 100.0
Matches 69; Conservative
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LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 99.0
Best Local Similarity 100.
Matches 69; Conservative
                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-620-2
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CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KMILNKLSQ 93
                                                                                                                                                                                                                                             TYPE: AMINO ACID STRANDEDNESS:
                                                                                                                                                                                                                                                                                         TOPOLOGY: LINEAR
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STATE: Illinois
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                                                                                    2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
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Length 86;
                                                                                                                                                                                                                                                                                                                           Sequence 6, Application PC/TUS0000953
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Rottman, James
APPLICANT: Rottman, James
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
FILE REFERENCE: SUN-110PRV
CURRENT PELLING DATE: 2000-01-14
NUMBER OF SEQ ID NOS: 6
SOUTHWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.0%; Score 386; DB 1; Length 93; 100.0%; Pred. No. 8.9e-41; Live 0; Mismatches 0; Indels
99.0%; Score 386; DB 13;
ilarity 100.0%; Pred. No. 8.2e-41;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/08464594
GENERAL INFORMATION:
APPLICANT: II, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, SYEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,594
FILING DATE: June 5, 1995
CLASSIRICATION: 435
PRIOR APPLICATION APTA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READBABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
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CITY: ROSELAND
STATE: NEW JERSEY
                                                                                                                                                                                                    KMILNKLSQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 93
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                           62 KMILNKLSQ 70
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Best Local Similarity
Matches 69; Conserv
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US-08-464-594-2
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2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
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Sequence 2, Application US/08558658

Sequence 2, Application US/08558658

SEMERAL INFORMATION:
SEMENT GROWN FOUNDED

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS

NUMBER OF SEQUENCES: 25

CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
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CITY: Chloago
STATE: 1111nois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Eloppy disk
COMPUTER: IBM PC compatible
OPERATIRG SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NATA:
RELING DATE:
FILING DAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99.0%; Score 386; DB 9; Length 93; 100.0%; Pred. No. 8.9e-41; tive 0; Mismatches 0; Indels
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TELECOMONICACHON INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFTCATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/08760127
GENERAL INFORMATION:
APPLICANT: Chang, Ming-shi
APPLICANT: Andrew, David P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 99.0
Best Local Similarity 100.
Matches 69; Conservative
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                                                                                                                                                                                                              62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIIIIIII
KMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              us-08-760-127-3
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0; Gaps
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NOVEL PROTEIN WITH CHEMOKINE ACTIVITY
                                                                                                                                                                                                                             OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/760,127
FILING DATE: 03-DEC-1996
CLASSIFICATION: 530
ATTORNEY/AGGNT INFORMATION:
NAME: Whiteford, Wendy A.
REGISTRATION NUMBER: 36,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search completed: July 28, 2003, 04:14:54 Job time: 81.2941 secs
                                                     ADDRESSEE: Amgen Inc.
STREET: 1840 De Havilland Drive
                                                                                                                                                                                                         COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: A TELECOMMUNICATION INFORMATION TELEPHONE: (805) 447-1008
                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (805) 447-1008
TELEFAX: (805) 447-1090
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                   ZIP: 91320
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 69; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGIH: 93 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: protein US-08-760-127-3
                 NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                           CITY: Thousand Oaks
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 KMILNKLSQ 70
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                                                                                                                                                                                                                           OPERATING SYSTEM:
SOFTWARE: PatentI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                               COUNTRY: U.S.A. ZIP: 91320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
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GenCore version 5.1.6

Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on:
July 28, 2003, 04:02:59; Search time 24.7059 Seconds
(without alignments)
748.942 Million cell updates/sec
Title:
US-09-509-165A-30
Perfect score:
1 LGPYGANMEDSVCCRDYVRY......EICADPRVPWYKMILNKLSQ 70
Scoring table:
Gapop 10.0, Gapext 0.5
Searched:
1233238 segs, 264332421 residues
```

Total number of hits satisfying chosen parameters:
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending\_Patents\_AA\_New:\*

1. /cgn2\_6/ptodata/2/paa/PCT\_NEW\_COMB.pep:\*

2. /cgn2\_6/ptodata/2/paa/NCSC\_NEW\_COMB.pep:\*

3. /cgn2\_6/ptodata/2/paa/USOG\_NEW\_COMB.pep:\*

4. /cgn2\_6/ptodata/2/paa/USOG\_NEW\_COMB.pep:\*

5. /cgn2\_6/ptodata/2/paa/USOG\_NEW\_COMB.pep:\*

6. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

7. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

8. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

10. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

11. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

12. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

13. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

14. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

13. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

14. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

14. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

14. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

14. /cgn2\_6/ptodata/2/paa/USOB\_NEW\_COMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

<u>:</u>	Description	Sequence 49, Appl	Sequence 53, Appl	20,	2, 2	. m		4	549,	638,	639,	640,		Sequence 2, Appli	Sequence 5105, Ap	Sequence 2, Appli				Sequence 4765, Ap
. {	TD	US-10-335-394-49	US-10-335-394-53	US-10-335-394-50	US-10-341-931-2	PCT-US02-35606-109	PCT-US02-35606-146	PCT-US02-40891-473	PCT-US02-40891-549	PCT-US02-40891-638	PCT-US02-40891-639	PCT-US02-40891-640	PCT-US02-40891-641	US-10-314-410-2	US-10-405-027-5105	US-10-445-790-2	US-60-453-135-8659	US-60-453-050-8659	US-60-455-444-4765	US-60-465-241-4765
9	: : B	12	12	12	12	7	7	7	7	7	7	7	7	12	12	12	14	14	14	14
	match bength bb	172	334	587	69	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
Query	March	99.5	99.5	99.5	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	99.0	0.66	0.66	0.66
	acore	388	388	388	386	386	386	386	386	386	386	386	386	386	386	386	386	386	386	386
Result	. Sec.	1	7	c	4	5	9	7	ω	6	10	11	12	13	14	15	16	17	18	19

Sequence 8659, Ap Sequence 333, App Sequence 2, Appli	2, 22, 257,	423, 425, 3, A	sequence 7, Appli Sequence 6, Appli Sequence 6, Appli Sequence 28, Appli Sequence 28, Appli		Sequence 567, App Sequence 6, Appl1 Sequence 2964, Ap
93 14 US-60-466-412-8659 678 2 PCT-US02-44891-333 93 12 US-10-285-572-2 9 17 IG-10-137-438A-2	93 12 US-10-406-494-2 677 2 PCT-US02-40891-422 678 2 PCT-US02-40891-257 676 2 PCT-US02-40891-257	12222	67 12 US-10-983445-7 77 10 US-10-001-221A-7 78 12 US-10-001-221A-6 69 11 US-10-001-221A-6 89 2 PCT-USO2-40891-546	100000	89 2 PCT-USU2-40891-567. 89 12 US-10-165-233A-6 89 12 US-10-405-027-2964
20 386 99.0 21 386 99.0 22 381 97.7 23 381 97.7	97.79 4.79 4.79	68 68.7 68 68.7 68 68.7	32 214:5 55:0 33 214:5 55:0 34 162:5 41.7 35 152 39:0 37 145 37.2	38 145 37.2 39 145 37.2 40 145 37.2 41 145 37.2	43 145 37.2 . 44 145 37.2 45 145 37.2

## ALIGNMENTS

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; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-49
            GENERAL INFORMATION:
APPLICANT: FWAK, LAITY
APPLICANT: BIRAGYD, ALY
TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
TILE REFERENCE: 14014 0316/P
CURRENT APPLICATION NUMBER: US/10/46,028
PRIOR FILING DATE: 2000-09-12
PRIOR FILING DATE: 1998-03-12
PRIOR FILING DATE: 1998-03-12
NUMBER OF SEO ID NOS: 57
SOFTWARE: FASTSED for Windows Version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
US-10-335-394-53
Sequence 53, Application US/10335394
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VKMILNKLSQ 70
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US-10-335-394-49
                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 49
LENGTH: 172
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
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RESULT 5
PCT-US02-35606-109
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APPLICANT: Mack, Larry
APPLICANT: Biragyn, Arya
APPLICANTON: METHON SAND COMPOSITIONS OF
TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
FILE REFERENCE: 14014.0316/P
CURRENT FILING DATE: 2000-12-31
PRIOR PILING DATE: 2000-09-12
PRIOR APPLICATION NUMBER: 66/077,745
PRIOR PLING DATE: 1998-03-12
NUMBER OF SEQ ID NOS: 57
SOFTWARE: PastSEQ for Windows Version 3.0
SEG ID NO 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-50
                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of artificial sequence:/note=synthetic construct
US-10-335-394-53
              APPLICANT: Birggyn, Arya
TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
TITLE OF INVENTION: METHODS AND COMPOSITIONS OF
TITLE OF INVENTION: CHEMOKINE-TUMOR ANTIGEN FUSION PROTEINS AS CANCER VACCINES
FILE REFERENCE: 14014,0316/P
CURRENT APPLICATION NUMBER: 0202-12-31
PRIOR FILING DATE: 2002-12-31
PRIOR RELING DATE: 2000-09-12
PRIOR FILING DATE: 1998-03-12
NUMBER OF SEQ ID NOS: 57
SOFTWARE: PASLED for Windows Version 3.0
SEQ ID NO 53
LENGTH: 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 LGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPW 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 388; DB 12;
Pred. No. 2.4e-40;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                          Score 388; DB 12;
Pred. No. 1.3e-40;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 50, Application US/10335394 GENERAL INFORMATION:
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ORGANISM: Artificial Sequence
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Best Local Similarity 98.69
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Best Local Similarity
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APPLICANT:
                                                                                                                                                                                                                                                                                                TYPE: PRT
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RESULT 4

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APPLICANT: Device, Anthony L.
APPLICANT: Device, Anthony L.
APPLICANT: Device, Anthony L.
APPLICANT: Ballo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-viral Agent for
TITLE OF INVENTION: Treatment and Prevention of Lentivirus Infection
TITLE OF INVENTION: Treatment and Prevention of Lentivirus Infection
TITLE OF INVENTION NUMBER: US/10/31,931
CURRENT APPLICATION NUMBER: US/10/31,764
PRIOR FILING DATE: 1997-09-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 109, Application PC/TUS0235606
GENERAL INFORMATION:
APPLICANT: HUMAN GENOME Sciences, Inc.
TILLE OF INVENTION: 41 Human Secreted Proteins
FILE REFERENCE: PS740PCT
CURRENT APPLICATION NUMBER: PCT/US02/35606
CURRENT FILIGO DATE: 2002-11-06
PRIOR APPLICATION NUMBER: 60/331,046
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 99.0%; Score 386; DB 2; Best Local Similarity 100.0%; Pred. No. 6e-41; Matches 69; Conservative 0; Mismatches 0
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Sequence 146, Application PC/TUS0235606
GENERAL INFORMATION:
APPLICAMT: Human Genome Sciences, Inc.
Application US/10341931
                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 109 LENGTH: 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
CORGANISM: Homo sapiens
US-10-341-931-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 KMILNKLSQ 70
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PCT-US02-35606-109
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62 KMILNKLSQ 70
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: PE564PCT
CURRENT APPLICATION: Albumin Fusion Proteins
FILE CORRENT APPLICATION NUMBER: PC7/US02/40891
CURRENT PEILNG DATE: 2002-12-23
FRIOR APPLICATION NUMBER: 60/341,811
PRIOR PELING DATE: 2002-02-28
PRIOR FILING DATE: 2002-05-10
PRIOR PELING DATE: 2002-05-10
PRIOR PELING DATE: 2002-05-10
PRIOR PELING DATE: 2002-05-10
PRIOR PELING DATE: 2002-07-24
PRIOR PELING DATE: 2002-07-24
PRIOR PELING DATE: 2002-07-24
PRIOR FILING DATE: 2002-07-10-12
PRIOR PELING DATE: 2002-10-12
PRIOR PELING DATE: 2002-10-20
PRIOR PELING DATE: 2002-10-20
PRIOR PELING DATE: 2002-10-13
PRIOR PELING DATE: 2002-10-13
PRIOR PELING DATE: 2002-11-05
PRIOR PELING DATE: 2002-01-38
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                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 99.0%; Score 386; DB 2; Length 93; Best Local Similarity 100.0%; Pred. No. 6e-41; Matches 69; Conservative 0; Mismatches 0; Indels
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Pred. No. 6e-41;
0; Mismatches 0;
TITLE OF INVENTION: 41 Human Secreted Proteins CURRENT PS740PCT
CURRENT APPLICATION NUMBER: PCT/US02/35606
CURRENT FILING DATE: 2002-11-06
PRIOR APPLICATION NUMBER: 60/331,046
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 160
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Albumin Fusion Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 473, Application PC/TUS0240891 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Human Genome Sciences, Inc
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100.0%; Pre
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ORGANISM: Homo sapiens
PCT-US02-35606-146
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Best Local Similarity
Matches 69; Conserv
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LENGTH: 93
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GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT FAPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-08
PRIOR FILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-05-10
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TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION UNBER: 60/378,950
PRIOR PELING DATE: 2002-05-10
PRIOR PELING DATE: 2002-07-24
PRIOR FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR PELING DATE: 2002-09-18
PRIOR FILING DATE: 2002-09-18
PRIOR FILING DATE: 2002-09-02
PRIOR PELING DATE: 2002-10-02
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PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR APPLICATION NUMBER: 60/351,360
PRIOR FILING DATE: 2002-11-05
                                                                                                                                               Sequence 549, Application PC/TUS0240891 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: 60/378,950
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62 KMILNKLSQ 70
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PCT-US02-40891-549
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
FULE REFERENCE: PF564PCT
FULE REFERENCE: 2002-12-23
FRICA PAPLICATION NUMBER: 60/341,811
PRICA PAPLICATION NUMBER: 60/341,811
PRICA PAPLICATION NUMBER: 60/341,811
PRICA FILING DATE: 2002-02-28
PRICA FILING DATE: 2002-02-28
PRICA FILING DATE: 2002-05-08
PRICA FILING DATE: 2002-05-08
PRICA FILING DATE: 2002-05-04
PRICA FILING DATE: 2002-09-18
PRICA PLICATION NUMBER: 60/411,355
PRICA PLICATION NUMBER: 60/411,355
PRICA FILING DATE: 2002-10-11
PRICA PLICATION NUMBER: 60/414,984
PRICA FILING DATE: 2002-10-20
PRICA FILING DATE: 2002-10-11
PRICA FILING DATE: 2002-10-20
PRICA FILING DATE: 2002-10-21
PRICA FILING DATE: 2002-10-21
PRICA FILING DATE: 2002-11-05
PRICA PRICATION NUMBER: 60/43; 4360
PRICA FILING DATE: 2002-01-28
PRICA FILING D
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                                                                    Gaps
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                        100.0%; Pred. No. 6e-41;
tive 0; Mismatches
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FILE REFERBNCE: PF544PCT
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 640, Application PC/TUS0240891; GENERAL INFORMATION:
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PRIOR APPLICATION NUMBER: 60/341,811
                                                                69; Conservative
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PCT-US02-40891-640
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                        Best Local Similarity
Matches 69; Conserva
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PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR PELING DATE: 2002-10-02
PRIOR PELING DATE: 2002-10-02
PRIOR PELING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR PILING DATE: 2002-10-03
PRIOR FILING DATE: 2002-11-05
PRIOR PILING DATE: 2002-11-05
PRIOR PILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-01-28
PRIOR FILING DATE: 2002-01-28
PRIOR FILING DATE: 2002-01-28
PRIOR PELING DATE: 2002-01-28
PRIOR FILING PAPILICATION NUMBER: 60/351,360
PRIOR FILING DATE: 2002-01-28
PRIOR PILING DATE: 2002-01-28
PRIOR PILING DATE: 2002-01-28
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GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INFUNENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT APPLICATION NUMBER: PCT/US02/40891
CURRENT APPLICATION NUMBER: 60/341,811
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR APPLICATION NUMBER: 60/360,000
PRIOR PILING DATE: 2002-02-28
PRIOR PILING DATE: 2002-02-8
PRIOR FILING DATE: 2002-05-10
PRIOR PILING DATE: 2002-05-10
PRIOR APPLICATION NUMBER: 60/318,950
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR FILING DATE: 2002-09-18
PRIOR PILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR PILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR APPLICATION NUMBER: 60/410,246
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR FILING DATE: 2002-11-05
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PCT-US02-40891-638
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PCT-US02-40891-639
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LENGTH: 93
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LENGTH: 93
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APPLICANT: Devisor, Anthony L.
APPLICANT: Devisor, Anthony L.
APPLICANT: Devisor, Alfedo
TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
FILE REFERENCE: 4115-109 CIP DIV
CURRENT APPLICATION NUMBER: US/10/445,790
CURRENT FILING DATE: 2003-05-27
PRIOR APPLICATION NUMBER: US 09/591,992
PRIOR FILING DATE: 1998-12-11
PRIOR FILING DATE: 2000-12-06
PRIOR APPLICATION NUMBER: US 60/186,416
PRIOR PILING DATE: 2000-03-02
PRIOR APPLICATION NUMBER: US 60/069,281
PRIOR PILING DATE: 1997-12-11
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
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99.0%; Score 386; DB 12;
Best Local Similarity 100.0%; Pred. No. 6e-41;
Matches 69; Conservative 0; Mismatches 0;
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FILE REFERENCE: PS806P1
CURRENT APPLICATION NUMBER: US/10/405,027
CURRENT FILING DATE: 2003-04-07
PRIOR FILING DATE: 2002-04-04
PRIOR APPLICATION NUMBER: 60/376,175
PRIOR PILING DATE: 2002-04-30
NUMBER OF SEQ ID NOS: 5810
SOFTWARE: Patentin Ver. 2.0
LENGTH: 93
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Best Local Similarity 100.
Matches 69; Conservative
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                                                                                       ; ORGANISM: Homo sapiens
US-10-314-410-2
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US-10-445-790-2
                      LENGTH: 93
TYPE: PRT
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Sequence 2, Application US/10314410

GENERAL INFORMATION:
APPLICANT: Holtzman, Douglas A.
APPLICANT: Holtzman, Douglas A.
APPLICANT: Holtzman, Douglas A.
APPLICANT: Holtzman, David P.
APPLICANT: Pan, Yang
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES
FILE REFERENCE: 07334-324001
CURRENT APPLICATION NUMBER: US/09/811,088
PRIOR FILING DATE: 2001-03-16
PRIOR FILING DATE: 2000-11-14
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1997-04-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2002-02-28
PRIOR PELICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-05-10
PRIOR PLICATION NUMBER: 60/378,950
PRIOR FILING DATE: 2002-07-24
PRIOR FILING DATE: 2002-07-24
PRIOR FILING DATE: 2002-09-18
PRIOR PLICATION NUMBER: 60/411,355
PRIOR PLICATION NUMBER: 60/411,984
PRIOR FILING DATE: 2002-10-02
PRIOR FILING DATE: 2002-10-02
PRIOR FILING DATE: 2002-10-13
PRIOR PLICATION NUMBER: 60/420,246
PRIOR FILING DATE: 2002-10-23
PRIOR PLICATION NUMBER: 60/423,623
PRIOR PLICATION NUMBER: 60/43,63
PRIOR PLICATION NUMBER: 60/43,63
PRIOR PLICATION NUMBER: 60/351,360
PRIOR PLICATION NUMBER: 60/417,611
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 99.0%; Score 386; DB 2; Length 93; Best Local Similarity 100.0%; Pred. No. 6e-41; Matches 69; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 08/938,365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 KMILNKLSQ 70
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g δý

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; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-445-790-2
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Gencore version 5.1.6
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OM protein - protein search, using sw model

July 28, 2003, 04:01:18; Search time 6.91176 Seconds Run on:

(without alignments) 973.617 Million cell updates/sec

Title: Perfect

US-09-509-165A-30 390 1 LGPYGANMEDSVCCRDYVRY......EICADPRVPWVKMILNKLSQ 70 score: Sequence:

Scoring table:

283224 segs, 96134422 residues BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR\_73:\* Database :

pirl:\* pir2:\* pir3:\* pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

		dФ			SOMETHES	
Result No.	Score	Query Match	Length	DB	ID	Description
	141	36.2	92	. ~	I52322	macrophage inflamm
7	131	33.6	91	7	A28815	monocyte chemoattr
m	131	33.6	92	7	A32393	macrophage inflamm
4	129	33.1	91	7	A46539	monocyte chemoattr
Ŋ	129	33.1	92	~	A30574	macrophage inflamm
9	123.5	31.7	92	Н	A31767	
7	122.5	31.4	92	~	C30552	
ထ	122	31.3	93	7	B35673	
σ	117	30.0		7	JC5295	ಾ
10	116	29.7		7	A54678	monocyte chemotact
11	115	29.5		~	148147	monocyte chemoattr
12	109.5	28.1		٦	807723	
13	101	27.4	66	7	JC2417	monocyte chemoattr
14	105	26.9		~	A60299	monocyte chemoattr
15	104.5	26.8		~	146730	immune activation
16	102.5	26.3		٦	A30209	PDGF-inducible JE
17	100.5	25.8	66	Н	A39296	monocyte chemoattr
18	100.5	25.8		~	JC2336	monocyte chemoattr
19	66	25.4		7	JC4912	eotaxin precursor
20	on.	24.9		7	C60407	monocyte adherence
21	95.5	24.5	116	7	I49555	gene C10 protein -
22	93.5	24.0	66	7	JC2136	monocyte chemoattr
23	93		96	7	I48099	eotaxin precursor
24	92	23.6		~	JC2478	eotaxin precursor
22	90.2	23.2		~	JE0177	lymphocyte and mon
56	88	22.6		~	ETHUL	lymphotactin precu
27	87	22.3	96	7	A37236	I-309 protein prec
28	83.5	21.4	92	7	S24236	TCA3 protein - mou
58	83.2	21.4	125	7	146857	monocyte chemoattr

:	cytokine	in precu	hemotact	tion-ind	d protei	okine LI	asic pro	growth-	n-8 homo	DF-1-bet	monse	acrophag	n-8 - do	-activat	e sidero	e chemot
:	monocytic cytokine	lymphotactin precu	monocyte chemotac	transformation-ind	RSV-induced prote	C-X-C chemokine L	platelet basic pro	pre-B-cell growth	interleukin-8 hom	cytokine SDF-1-bet	cytokine - mouse	alveolar macropha	interleukin-8	neutrophil-activa	ferrichrome sidero	granulocyte chemot
6	A48093	ETMSL	A55984	A26736 .	150417	A57325	542881	A53497	153416	G01540	181182	B44253	JN0841	A55010	T52486	A54188
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ć	.6	114	72	103	103	132	119	8	8	93	93	117	95	114	3947	75
	19.5	19.5	19.1	17.8	17.8	17.7	17.4	17.2	17.2	17.2	17.2	17.2	16.9	16.9	.16.8	16.7
ľ	9/	97	74.5	69.5	69.5	69	68	29	67	29	49	. 67	99	99	65.5	65
ć	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

### ALIGNMENTS

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Cybate: 29-May-1998 #text_change 16-Jul-1999
Cybate: 29-May-1998 #text_change 16-Jul-1999
CyAccession: 15232
Ryshi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Balochem. Bloppys. Res. Commun. 211, 289-285, 1995
A.Title: Molecular Cloning and posttranscriptional regulation of macrophage inflammat A; Reference number: 152322, MUID:95298037; PMID:7779098
A; Accession: 152322
A; Molecular Cloning and posttranscriptional regulation of macrophage inflammat A; Recience number: 152322
A; Research Commun. 210, 289-285
A; Residues: 1-92 CRES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Accession: A28815
R;Schall, T.J; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M.;
J. Immunol. 141, 1018-1025, 1988
A;Title: A human T cell-specific molecule is a member of a new gene family.
A;Reference number: A28815; MUID:88285659; PMID:2456327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                monocyte chemoattractant cytokine RANTES precursor - human
N;Alternate names: small inducible cytokine A5; T-cell specific cytokine RANTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 PYGAD-TPTACCFSYGR-QIPRKFIADYFETSELCSQPGVIFLTKRNRQICADPKETWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Homo sapiens (man)
C;Date: 30-Jun-1989 #sequence_revision 16-Aug-1996 #text_change 29-May-1998
                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: EMBL:U22414; NID:9790632; PIDN:AAA80608.1; PID:9790633
C;Superfamily: macrophage inflammatory protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36.2%; Score 141; DB 2, 39.4%; Pred. No. 5e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17; Mismatches
- rat
macrophage inflammatory protein-lalpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 39.4%
Matches 26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63 MILNKL 68
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A; Accession: A28815

A; Cross-references: GB:M21121 A; Molecule type: mRNA A; Residues: 1-91 <SCH>

Comment: The acronym RANTES reflects the description "Regulated upon Activation, No

A; Gene: GDB:SCYA5; D17S136E A; Gross-references: GDB:120749; OMIM:187011 A; Map position: 17q11.2-17q12 C; Superfamily: macrophage inflammatory protein C; Superfamily: macrophage inflammatory protein C; Keywords: chemotaxis; cytokine; immediate-early protein; inflammation; T-cell

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Residues: 24-33,'XX',36-54 <SHE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Introns: 23/3; 26/1; 63/2
C; Superfamily: macrophage it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63 MILNKL 68
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A; Residues: 1-91 <SHI>
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A Molecule type: MRNA
A Residues: 1-92 CKWO>
A Kresidues: 1-92 CKWO>
A Kresidues: 1-92 CKWO>
A Kresidues: 1-92 CKWO>
A Kresidues: 1-92 CKWO>
A F. Davatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos, C.; C
J. Exp. Med. 167, 1939-1944, 1988
A Fitle: Cloning and characterization of a CDNA for murine macrophage inflammatory prote
A Reference number: S04533; MuID:88258380; PMID:3290382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ü
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Species: Mus musculus (house mouse)
C; Species: Wus musculus (house mouse)
C; Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 16-Jul-1999
C; Accession: 151685; A32395; S04533; A33885; A30552; PS0303; A27596; I56104
R; Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.
Noticlet Acids Res. 18, 5561, 1990
A; Title: Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory A; Reference number: S11685; MuID:91016858; PMID:2216738
A; Roceusle type: DNA
A; Residues: 1-92 <GRO>
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A; Residues: 1-21, 'L', 23-61, 'A', 63-92 <BRO>
A; Cross-references: GB:MZ3447; NID:9533240; PIDN:AAA40146.1; PID:9533241
A; Cross-references: GB:MZ3447; NID:9533240; PIDN:AAA40146.1; PID:9533241
B; Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.; Mas
J. Exp. Med. 168, 2251-2259, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: EMBL:X53372; NID:954062; PIDN:CAA37452.1; PID:9297531
A;Note: the authors' translation of the nucleotide sequence differs at several positions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: mRNA
A; Residues: 1.48, 'E', 50-90,'I',92 <DA2>
A; Residues: 1.48,'E', 50-90,'I',92 <DA2>
A; Note: the authors translated the codon GAG for residue 49 as Asp and ATT for residue
A; Note: the sequence has been corrected in reference A53885
B; Davatells, 6.7 Tekamp-Olson, P; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos, C.; J. Exp. Med. 170, 2189, 1989
A; Reference number: A53885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      macrophage inflammatory protein-1-alpha precursor - mouse
N;Alternate names: heparin-binding chemotaxis protein; L2G25B protein; SCI/MIP-la; SIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ø
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R;Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A;Tille: A family of small inducible proteins secreted by leukocytes are members of so f various activation processes.
A;Reference number: A30552; MUID:89093958; PMID:2521353
A;Accession: A30552
                                                                                                                                                                            ij
                                                                                                                                                                                                                                                                                       25 PYSS--DITPCCFAYIARPLPRAHIKEYFYTSGKCSNPAVVFVTRKNRQVCANPEKKWVR 82
                                                                                                                                                                                                                                                  3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
                                                                                                                                                                                Gaps
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F;1-23/Domain: signal sequence #status predicted <SIG>F;24-91/Product: T-cell protein RANTES #status predicted <MAT>
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Proc. Natl. Acad. Sci. U.S.A. 86, 1963-1967, 1989
A;Title: cDNA sequence of two inducible T-cell genes.
A;Reference number: A32393; MUID:89184547; PMID:2784565
A;Accession: A32393
                                                                                                          Score 131; DB 1;
Pred. No. 8.2e-09;
                                                                                                                                                                            17; Mismatches
                                                                                                          33.6%;
                                                                                                                                                                                22; Conservative
                                                                                                              Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EYINSL 88
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A; Accession: A53885
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A. Residues: 1-18, 'A', 20-91 <SCH>
A. Residues: 1-18, 'A', 20-91 <SCH>
A. Residues: 1-18, 'A', 20-91 <SCH>
A. Cross-references: GBI-S37648; NID:q250207; PIDN:AAB22330.1; PID:g250208
A. Experimental source: macrophage cell line PUS-1.8
A. Note: sequence extracted from NCBI backbone (NCBIN:106768, NCBIP:106770)
R. Shin, H. S., Drysdale, B. E., Shin, M. L.; Noble, P.W.; Flaher, S.N.; Paznekas, W. A.—
Mol. Cell Biol. 14, 2914-2925, 1994
A. Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking PA. Reference number: 148654; MUID:94217689; PMID:7513046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-91 cADA
A;Residues: 1-91 cADA
A;Cross-references: EMBL:U02298; NID:9460090; PIDN:AAA18302:1; PID:9460091
R;Schall, T.J.; Simpson, N.J.; Mak, J.Y.
Eur. J Immunol. 22, 1477-1481, 1992
A;Tritle: Molecular cloning and expression of the murine RANTES cytokine: structural_a
A;Reference number: A46539; MUID:92289805; PMID:1376260
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R:Wolpe, S.D.; Davatells, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.; Mc J. Exp. Med. 167, 570-581, 1988
A; Title: Macrophages secrete a novel heparin-binding protein with inflammatory and a A; Reference number: A27596; MUID:88154745; PMID:3279154
A; Reference number: A27596; MUID:88154745; PMID:3279154
A; Reference number: A27596
A; Molecule type: protein
A; Residuse: 24-33, Xx, 36-42 < WOL>
A; Residuse: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
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A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pro, and 39-Thr were also found
A; Note: 26-Met, 30-Pr
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C; Species: Mus musculus (house mouse)
R; Danoff, T.M.; Lalley, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
J. Immunol. 152, 1182-1189, 1994
A; Title: Cloning, genomic organization, and chromosomal localization of the Scya5
A; Reference number: I48875; MuID:94132613; PMID:7507961
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: I56104
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-92 < RES>
A; Cross-references: GB:M73061; NID:g199694; PIDN:AAA39707.1; PID:g199695
C; Comment: This protein is a monokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 92;
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8.3e-09;
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A; Cross-references: GDB:120368; OMIM:182283
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A;Residues: 1-14,'S',16-69,'G',71-92 <NAP>
A;Cross_references: GB:M69201; NID:9178021
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A;Molecule type: DNA
A;Residues: 1-92 <BAI>
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Best Local Similarity 34.5%
Matches 20; Conservative
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NiAlternate names: LD78-alpha protein precursor; lymphocyte tumor promoter-induced prote
tivation protein 1
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Accession: A335673; A30574; A30412; A24198; A30908
R;Nakao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3658, 1990
A;Titles: Structures of human genes coding for cytokine LD78 and their expression.
A;Reference number: A35673; MUID:90287155; PMID:1694014
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R:Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
MbA Cell Biol. 9, 589-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell prolif A;Reference number: A30412; MUID:91103879; PMID:2271120
A;Accession: A30412
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R;2ipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
J. Immunol. 142, 1382-1590, 1989
A;Title: Mitogenic activation of human T cells induces two closely related genes which A;Reference number: A30574; MUID:89140347; PMID:2521882
                                                                                                                                                          CDNA from renal tubular epithelium encoding PMID:1375672
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A; Residues: 1-92 < ALD.
A; Residues: 1-92 < ALD.
A; Cross-references: GB: M23178; GB: M32337; NID: g182846; PIDN: AAA35858.1; PID: g182847
A; Cross-references: GB: M23178; GB: M32337; NID: g182846; PIDN: AAA35858.1; PID: g182847
B; Obaru, K.; Fukuda, M.; Maeda, S.; Shimada, K.
J. Biochem. 99, 885-894, 1986
A; Title: A CDNA clone used to study mRNA inducible in human tonsillar lymphocytes by A; Reference number: A24198; MUID: 86223879; PMID: 3086300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-91/Product: monocyte chemoattractant cytokine RANTES #status predicted <MAT>
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3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK
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C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation
F;1-23/Domain: signal sequence #status predicted <SIG>F;24-91/Product: monocout of the control of
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Best Local Similarity 36.4%
Matches 24; Conservative
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A; Residues: 1-92 <NAK>
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A; Residues: 1-92 <OBA>
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Microphage inflammatory protein 1-beta precursor [validated] - human
NiAlternate names: cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation g
protein 2 (Act-2); T-cell activation protein gamma
C;Species: Homo sapiens (man)
C;Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
C;Accession: JH0319; A40978, A31767; A37411; B30574; B45817; D30552
N;Balxeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Vlegas-Feq
Mol. Immunol. 27, 1091-1102, 1990
A;Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
A;Reference number: JH0319; MUID:91061800; PMID:2247088
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A;Experimental source: natural killer cell, strain CD3-CD2+, F5, 5IIIE5
R;Napolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarra, J.R.; Seuanez, H.N.; Leonard, W.J.
J. Biol. Chem. 266, 17531-17536, 1991
A;Title: The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsi A;Reference number: A40978; MUID:91373378; PMID:1894635
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A; Residues: 1-92 <LID>
A; Cross-references: GB: 304130; NID:g178017; PIDN:AAA51576.1; PID:g178018
A; Cross-references: GB: 304130; NID:g178017; PIDN:AAA51576.1; PID:g178018
B; Chang, H.C.; Reinherz, E.L.
Eur. J. Immunol: 19, 1045-1051, 1989
A; Title: Isolabation and characterization of a cDNA encoding a putative cytokine which A; Reference number: A37411; MUID:89325421; PMID:2568930
A; Accession: A37411
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A;Map position: 17q11-17q21
C;Superfamily: macrophage inflammatory protein
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-92/Product: macrophage inflammatory protein 1-alpha #status predicted <MAT>
F;33-57,34-73/Disulfide bonds: #status predicted
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A; Residues: 1-19,'L',21-92 <2IP>
A; Cross-references: GB MA5316; NID:g602454; PIDN:AAA57256.1; PID:g602455
R;Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. 143, 2907-2916, 1989
A; Title: A novel polypeptide secreted by activated human T lymphocytes.
A; Reference number: A45817; MUID:90038522; PMID:2809212
A; Accession: B45817
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A;Title: Identification, cloning, and characterization of an immune act A;Reference number: A31767; MUID:89071764; PMID:2462251
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A;Residues: 1-92 <CHA>
A;Cross-references: GS116166; NID:q32035; PIDN:CAA34291.1; PID:g32036
K;Clifel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
J. Immunol. 142, 1582-1590, 1989
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                                                                                                                                                                                                                                                                                  Length 92;
                                                                                                                                                                                                                                                                                  33.1%; Score 129; DB 2; 34.5%; Pred. No. 1.5e-08; iive 14; Mismatches 24
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Wed Jul

1;

Indels

Length 92;

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C;Comment: This protein is a monokine.
C;Genetics: 26/1; 64/2
A;Introns: 26/1; 64/2
C;Superfamily: macrophage inflammatory protein
C;Keywords: glycoprotein
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
F;76/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                    3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25 PMGSDPPTS-CCFSYTSRQLHRSFVMDYYETSSLCSKPAVVFLTKRGRQICANPSEPWVT 83
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                                                                                                                                                                                                                                                                                               31.4%; Score 122.5; DB 2;
39.4%; Pred. No. 9e-08;
tive 10; Mismatches 29;
                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 39.4...
Best Local Similarity 50.4...
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A; Introns: 26/1; 64/2
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Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63 MILNKL 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84 EYMSDL 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-93 <BLU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-93 <NAK>
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A; Residues: 1-93 <IRV>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Status: preliminary
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A; Residues: 1-92 CBRO.
A; Cross-references: GB:M23503; NID:9533244; PIDN:AAA40148.1; PID:9533245
A; Cross-references: GB:M2350, 1988
R; Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.; Mas
A; Exp. Mad. 168, 2231-2259, 1988
A; Title: Resolution of the two components of macrophage inflammatory protein 1, and clon
A; Reference number: JL0088; MUID:89067830; PMID:3058856
                                                                                                                                                                                                                                                                                                         A; Wolecule type: mRNA
A; Residues: 1-39, REASS', 46-92 <BRO>
A; Residues: 1-39, REASS', 46-92 <BRO>
A; Cross-references: GB:M23502; NID:9533212; PIDN:AAA36656.1; PID:9533213
B; Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
Submitted to the Brookhaven Protein Data Bank, January 1994
A; Reference number: A52206; PDB:1HUM
A; Reference number: A52206; PDB:1HUM and disulfide bond assignments by (1)H-NMR, residue
C; Comment: This protein is secreted by activated lymphocytes and monocytes. It is bound
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N.Alternate names: H400; SIS gamma; T-cell activation protein gamma
C; Species: Mus musculus (house mouse)
C; Species: Wus musculus (house mouse)
C; Date: 28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999
C; Date: 28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999
C; Accession: C30522; Ju0088; PS0304; S2042
J. Immunol. 142, 679-687, 1989
A; Title: A family of small inducible proteins secreted by leukocytes are members of a sof various activation processes.
A; Reference number: A30552; MUID:89093958; PMID:2521353
          A:Residues: 7.55, T7,57-79, T7,81-92 <MIL>
A:Cross-references: GB:M57503; NID:9339726; PIDN:AAA36752.1; PID:9339727
R:Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A/Title: A family of small inducible proteins secreted by leukocytes are members of sof various activation processes
A:Reference number: A30552; MUID:89093958; PMID:2521353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C.Superfamily: macrophage inflammatory protein
C.Keywords: chemotaxis: cytokine; inflammation
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-92/Product: macrophage inflammatory protein 1-beta #status experimental <MAT>
F:34-58,35-74/Disulfide bonds: #status experimental
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A; Residues: 24-33,'XX',36,'X',38 <SH2>
R; Daubersles, P.; Lepretre, F.; Bailleul, B.; Grove, M.; Pragnell, I.; Plumb, M.
submitted to the EMBL Data Library, October 1991
A; Description: Sequence of the murine macrophage inflammatory protein 1b gene.
A; Reference number: S22042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
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A;Residues: 1-92 <SHE>
A;Cross-references: GB:M35590; NID:g199696; PIDN:AAA39708.1; PID:g199697
A;Accession: PS0304
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Best Local Similarity 40.0%; Pred. No. 6.8e-08;
Matches 24; Conservative 9; Mismatches 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Cross-references: GDB:127451; OMIM:153335
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A; Introns: 26/1; 64/2
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A; Residues: 1-92 <DAU>
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A;Cross-references: GB:D90145; NID:g219907; PIDN:BAA14173.1; PID:g219908
R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell Fro A;Reference number: A30412; MUID:91103879; PMID:2271120
A;Accession: B30412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:M24110; GB:M32338; NID:9182848; PIDN:AAA35859.1; PID:91828455 R;Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Se Nucleic, GAcids Res. 18, 3261-3270, 1990
A;Title: Two inflammatory mediator cytokine genes are closely linked and variably CPP A;Reference number: S10157; MUID:90287702; PMID:1972563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666 C;Comment: This protein is a member of a "small inducible" or "activation specific" g
LD78-beta protein precursor - human
N;Alternate names: macrophage inflammatory protein homolog GOS19-2; small inducibl∈c
                                                                        C;Species: Homo sapiens (man)
C;Date: 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 20-Jun-2000
C;Accession: B35673; B30412; S10157; B30908
C;Accession: B35673; B30412; S10157; B30908
Mol. Cell. Biol. 10, 3646-3658, 1990
A;Title: Structures of human genes coding for cytokine LD78 and their expression. A;Reference number: A35673; MUID:90287155; PMID:1694014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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C; Keywords: cytokine
F;1-22/Domain: signal sequence #status predicted <SIG>
F;23-93/Product: LD78-beta protein #status predicted <MAT>
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C; Accession: I4817
R; Yoshimura, T.
R; Yoshimura, T.
J. Immunol. 150, 5025-5032, 1993
A; Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression A; Reference number: I48147; MUID: 93267104; PMID: 8496603
A; Accession: I48147
A; Actus: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Residues: 1-120 <RES>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             monocyte chemoattractant protein-1 - guinea pig
C;Species: Cavia porcellus (guinea pig)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immediate-early serum-responsive protein JE precursor - rat
NiAlternate names: monocyte chemoattractant protein-1.
C.Species: Rattus norvegicus (Norway rat).
C.Species: Rattus norvegicus (Norway rat).
C.Species: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C.Specssion: S07723, JN0128
R.Timmers, H.T.M.: Pronk, G.J.: Bos, J.L.: van der Eb, A.J.
Nucleic Acids Res. 18, 23-34, 1990
A.Title: Analysis of the rat JE gene promoter identifies an AP-1 binding slt
A.Reference number: S07723; MUID:90174947; PMID:2106664
A.Recession: S07723
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Genetics: A.Gener: MCP-1

A.Gene: MCP-1

C.Superfamily: macrophage inflammatory protein
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                          A.Map position: 17q11-17q12
A.Introns: 36/1; 75/2
C.Superfamily: macrophage inflammatory protein
C.Superfamily: macrophage inflammation
E.1-33/Domain: signal sequence #status predicted <a href="#signal-squence">#signal-squence</a>
E:34-109/Product: monocyte chemochactic protein 3 #status predicted
E:34/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                        Length 109;
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                                                                                                                                                                                                                                                                                     / Match 29.7%; Score 116; DB 2; Local Similarity 36.2%; Pred. No. 6.6e-07; nes 25; Conservative 11; Mismatches 31;
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   A; Cross-references: GDB:138473; OMIM:158106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94 ODFMKHLDK 102
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Matches
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R;Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.
Biochem. Biophys. Res. Commun. 191, 535-542, 1993
A;Title: Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the cDNA and A;Reference number: JC1478; MUID:93213290; PMID:8461011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the
                                                                                                                                                                                    C;Species: Homo sapiens (man)
C;Date: Oz-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000
C;Date: Oz-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000
C;Accession: JG5295
R;Van Collile, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van Da Biochem. Biophys. Res. Commun. 231, 726-730, 1997
A;Title: Human monocyte chemotactic.protein-2: cDNA cloning and regulated expression of A;Reference number: JG5295; MJID:9724420; PMID:9070881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C:Comment: This protein belongs to the beta-chemokine family which is one of the major H
tis and in tumor biology, and contribute to the trafficking and recuitment of the respon
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C;Comment: This protein induces proteinase secretion and chemotaxis by macrophages and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            monocyte chemotactic protein 3 precursor - human
N;Alternate names: monocyte chemoattractant protein MCP-3
C;Species: Homo saplens (man)
C;Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 16-Jul-1999
C;Accession: A54678; JC1478; S3222
R;Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, Genomics 21, 403-408, 1994
A;Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to a steference number: A54678; MUID:94375065; PMID:7916328
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TACCESYTSRQIPQNFIADYFETSSQCSKPSVIFLTKRGRQVCADPSEEWVQKYVSDL
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C;Superfamily: macrophage inflammatory protein
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-99/Product: monocyte chemotactic protein-2 #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 30.0%; Score 117; DB 2; Length 99; Best Local Similarity 33.8%; Pred. No. 4.6e-07; Matches 25; Conservative 14; Mismatches 29; Indels
                                                                                                                                                             chemotactic protein-2 precursor - human
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A; Residues: 1-109 <OP2>
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A; Residues: 1-109 <OPD>
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A; Accession: A60299
A; Status: not compared with conceptual translation
A; Molecule type: mRNA
A; Residues: 1-99 - 600T>
B; Furtuan; Y; Nomura, H.; Notake, M.; Oyamada, Y.; Fukul, T.; Yamada, M.; Larsen, C
Biochem. Biophys. Res. Commun. 159, 249-255, 1989
A; Title: Cloning and sequencing of the CDNA for human monocyte chemotactic and acti-a
A; Reference number: A32300; MUID: 89165862; PMID: 2923622
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A; Residues: 1-99 < FURN
B; Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanow t
Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989
A; Title: Complete amino acid sequence of a human monocyte chemoattractant, a putati-e
A; Reference number: A32396; MUID:89184525; PMID:2648385
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A;Molecule type: mRNA
A;Residues: 1-99 <VO2>
A;Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
A;Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
B;Bottazzi, B.; Colotta, F.; Stoa, A.; Nobili, N.; Mantovani, A.
Int. J. Cancer 45, 795-797, 1990
A;Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotac—1
A;Accession: A33476
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 1-99 < ROLS
A;Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; EF
A;Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; EF
A;Yoshimura, T: Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
FEBS Lett. 244, 487-493, 1989
A;Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning_
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A; Residues: 29-33, XX', 36-52; 82-92 <DEC>
A; Residues: 29-33, XX', 36-52; 82-92 <DEC>
R; Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P. R; Li, Y.S.; Shyy, Y.J.; Wight, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P. Myl. Cell. Biochem. 126, 61-68, 1993
A; Title: The expression of monocyte chemotactic protein (MCP-1) in human vascular e A; Reference number: 157488; MUID:94150478; PMID:8107690
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R; Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
Chinese J. Microbiol. Immunol. 14, 29-32, 1994
A.Fitle: The PCR, Cloning and sequencing of human monocyte chemoattractant protein-A.Reference number: JC1096
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A Molecule The Molecule Molecul
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A; Residues: 1-99 < VOS>
A; Cross-references: 1910ma cell line U-105MG
A; Experimental source: glioma cell line U-105MG
B; Yoshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. 305, 47-56, 1991
A; Ritle: Human monocyte chemoattractant protein-1 (MCP-1).
A; Reference number: 151841; MUID:92095166; PMID:1661560
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A,Status: not compared with conceptual translation
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A; Residues: 24-28,'Q',30-99 <YEQ>
C; Genetics:
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C;Species: Sus scrofa domestica (domestic pig)
C;Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999
C;Accession: JC2417.
R;Hosang, K; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Blochem Blophys. Res. Commun. 205, 148-153, 1994
A;Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analys
A;Reference number: JC2417; MUID:95091716; PMID:7999015
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C; Species: Homo saplens (man)
C; Date: 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change 16-Jul-1999
C; Accession: A35474; A33476; S03339; 151841; A60299; A32300; A32396; A34561; I57488; JC1
C; Accession: A35474; A33476; S03339; Distance Distan
                                                                                                                                                                                                                                                                                       Experimental source: spleen cells Note: the authors translated the codon GAA for residue 62 as Lys and GCT for residue
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C;Superfamily: macrophage inflammatory protein
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-148/Product: immediate-early serum-responsive protein JE #status predicted <MAT>
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A;Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124
A; Title: B.J.; Stier, P.; Ernst, T.; Wong, G.G.
A;Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A;Reference number: A33476; MUID:90097880; PMID:2513477
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A, Experimental source: corpus luteum
C, Superfamily: macrophage inflammatory protein
E, 1-23/Domain: signal sequence % status predicted <SIG>
F; 24-99/Product: monocyte chemoattractant protein-2 % status predicted <MAT>
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A;Cross-references: GB:M57441; NID:9205333; PIDN:AAA63496.1; PID:9205334
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Best Local Similarity 37.3%
Matches 22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 ILNKLSQ 70
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A; Residues: 1-99 <SHY>
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A; Residues: 1-99 <HOS>
                                                                                               Molecule type: mRNA
                           A; Accession: JN0128
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Immune activation gene 2 - rabbit
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 16-Jul-1999
C;Accession: 146730
R;Mori, S.; Goto, K.; Goto, F.; Mutakami, K.; Obkawara, S.; Yoshinaga, M.
Int. Immunol. 6, 149-156, 1994
A;Title: Dynamic changes in mRNA expression of neutrophils during the course of acute in A;Reference number: 146730; MUID: 94198229; PMID: 8148323
A;Reference number: 146730
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Wolecule type: mRNA
A;Residues: 1-92 <MOR>
A;Cross references: GB: D17402; NID: 9599577; PIDN: BAA04226.1; PID: 9599578
C;Superfamily: macrophage inflammatory protein
                          A Map position: 17q11.2-17q12

S. Superfamily: macrophage inflammatory protein

C. Superfamily: macrophage inflammatory protein

C. Superfamily: macrophage inflammation; pyroglutamic acid

C. Superfamily: macrophage inflammation;

F. 123/Domain: signal sequence #status predicted <SiGo

F. 14-39/Product: monocyte chemoattractant protein 1 #status experimental <MAT>

F. 29-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MP

F. 24/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experimen

F. 37/Binding site: carbohydrate (Asn) (covalent) #status predicted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 PQGLAQPDAINAPVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADP 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 PYGANMEDSV----CCRDYVRYRLPL-RVVKHFYWTSDSCPRPGVVLLTFRDKEICADP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                     Ouery Match 26.9%; Score 105; DB 2; Length 99; Best Local Similarity 29.7%; Pred. No. 1.3e-05; Matches 22; Conservative 16; Mismatches 30; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Score 104.5; DB 2; Length 5; Pred. No. 1.4e-05; 16; Mismatches 29; Indels
   GDB:125279; OMIM:158105
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Best Local Similarity 30.3%;
Matches 20; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57 RVPWVKMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : ||: :: | : 79 KQKWVQDSMDHLDK 92
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84 EYVDDL 89
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A; Cross-references:
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein. - protein search, using sw model

July 28, 2003, 03:58:03 ; Search time 3.67647 Seconds (without alignments) 789.709 Million cell updates/sec Run on:

US-09-509-165A-30 390
1 LGPYGANMEDSVCCRDYVRY......EICADPRVPWVKMILNKLSQ

70

BLOSUM62 Gapop 10.0 , Gapext 0.5 Title: Perfect score: Sequence:

Scoring table:

112892 segs, 41476328 residues Searched:

112892 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt\_40:\* Database : Pred, No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	, Description	000626 homo sapien	mus m	P55774 h small ind	P50229 rattus norv	Q90826 gallus gall	homo sa	_	Q62401 mus musculu	P30882 mus musculu	P10147 homo sapien	P50231 rattus norv	P50230 rattus norv	Q16627 homo sapien		homo sa		P97272 cavia porce		P16619 homo sapien		097919 bos taurus	P80075 homo sapien	P80098 homo sapien	Q08782 cavia porce	Q92583 homo sapien	Q99731 homo sapien	Q99616 homo sapien	mus n	Q9jkc0 mus musculu	P14844 rattus norv	. P49873 sus scrofa		P13500 homo sapien
SUMMARIES	. OI	SY22_HUMAN	SY22_MOUSE	SY18_HUMAN	SY03_RAT	SY04_CHICK	SY05_HUMAN	SY03_MOUSE	SY12_MOUSE	SY05_MOUSE	SY03_HUMAN.	SY05_RAT	SY04_RAT	SY14_HUMAN	VMI2_KSHV	SY15_HUMAN	SY04_HUMAN	SY05_CAVPO	SY04_MOUSE	SY3L_HUMAN	REG1_BOVIN	SY05_BOVIN	SY08_HUMAN	SY07_HUMAN	SY02_CAVPO	SY17_HUMAN	SY19_HUMAN	SY13_HUMAN	SY19_MOUSE	SY24_MOUSE	SY02_RAT	SY08_PIG	SY26_HUMAN	SY02_HUMAN
	Length DB	93 1				90 1		92			92 1																		80	19				99 1
ð	Query Match	. 6	68.7	37.2	36.2	35.3	33.6	33.6	33.2	33.1	33.1	33.1		32.3	32.1	32.1	31.7	31.5	31.4	31.3	30.4	30.3	30.0	29.7	29.2	29.0	28.8	28.1	28.1	28.1		27.4	27.2	26.9
	Score	386	268	145	141	137.5	131	131	129.5	129	129	129	128.5	126	125	125	123.5	123	122.5	122	118.5	118	117	116	115	113	112.5	109.5	109.5	109.5	109.5	107	106	105
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Q9myn4 macaca fasc P46632 oryctolagus O89093 mus musculu P10148 mus musculu 000175 homo sapien Q01414 bos taurus P28291 bos taurus P58291 homo sapien P52203 canis famil Q29288 sus scrofa P27784 mus musculu
SYO2_MACFA SYO4_RABIT SY22_MOUSE SY24_HUMAN SYO8_BOYIN MCPA_BOYIN MCPA_BOYIN ECTA_HUMAN SY33_HUMAN SY02_CANFA SY05_CANFA SYO5_RO
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104.5 104.5 102.5 101.5 101.5 99.5 97 95.5
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## ALIGNMENTS

SY22_HUMAN STANDARD; PRT; 93 AA.	15-JUL-1999 (Rel. 38, Created) 15-JUL-1999 (Rel. 38, Last sequence update) 15-JUL-1999 (Rel. 41, Last annotation update) 15-JUN-2002 (Rel. 41, Last annotation update) 5mall inducible cytckine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine	STCP-1). SCYA22 OR MDC OR A-152E5.1. Homo sapiens (Human). Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. NCBL_TaxID-9606;	[1] SEQUENCE FROM N.A., AND SEQUENCE OF 25-35. TISSUE-Macrophage; MEDLINE-97296313; PubMed-9151897; Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P., Leviten D., Mantovani A., Gray P.W.; "Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer	RE J. Exp. Med. 185:1595-1604(1997).  RE J. Exp. Med. 185:1595-1604(1997).  RE SEQUENCE FROM N.A.  TISSUE-Macrophage.  RY MEDLINE-97460118; PubMed-9312138;  RA Meng T., Boone T., Andrew D.P.;  R. Meng T., Boone T., Andrew D.P.;  R. Molecular cloning and functional characterization of a novel CC removed for real chemotractic protein (STCP-1) that  RY specifically acts on activated T lymphocytes.";  T. J. Biol. Chem. 272:25229-25237(1997).	131   SEQUENCE FROM N.A.   MEDLINE-99425270; PubMed-10493829;   Loftus B.J., Kim U; -J., Sneddon V.P., Kalush F., Brandon R.,   Fuhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L.,   Deslattes Mays A., Cao Y., Xu R.X., Kang HL., Mitchell S.,   Eichler E.E., Harris P.C., Venter J.C., Adams M.D.;   Genome duplications and other features in 12 Mb of DNA sequence from   human chromosome 16p and 16q.";   Genomics 60:295-308(1999).	TISSUE-Pancreas, and Spleen; RC TISSUE-Pancreas, and Spleen; RA Strausberg R.; Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases. RN [5] RP RECEPTOR INTERACTION. RX MEDLINE-98104168; Pubwed-9430724; RA Imal T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R., RA Imal T., Chantry D., Raport c.J., a functional ligand for the CC RT "Macrophage-derived chemokine is a functional ligand for the CC
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SEQUENCE FROM N.A.
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P55774:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84
SUBCELLULAR LOCATION: Secreted.

TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN MONOCYTE-DERIVED DENDRITIC CELLS, AND THYMUS. ALSO FOUND IN LYMPH NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED MACROPHAGES. LOWER EXPRESSION IN LUNG AND SPLEEN. VERY WEAK EXPRESSION IN SMALL INTESTINE.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
15-JUR-2002 (Rel. 41, Last annotation update)
5mall inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
6ACLIVATED B and dendritic cell-derived).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        SMALL INDUCIBLE CYTOKINE A22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     631FBE9CC083F787 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                           SMART; SM01199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG
CYLOKine; Chemotaxis; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
BY SIMILARITY.
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InterPro: IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
                                                                                                                                                                                                                                                                                                EMBL; U83239; AAB53372.1; -. EMBL; ACOU4382; AAC24306.1; -. EMBL; BC027952; AAH27952.1; -. HSSP; Q98157; 1CM9.
                                                                                                                                                                                                                                                                                       EMBL; U83171; AAB58360.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93 AA; 10580 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
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60
76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                   602957;
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088430;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                AND DENDRITIC CELLS. LOW EXPRESSION IN LUNG, THYMOCYTES, LYMPH NODE, AND UNSTITULATED SPLENIC CELLS.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A18 precursor (CCL18) (Macrophage
inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
chemokine) (CC chemokine PARC) (Alternative macrophage activation-
associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
                                                                                                                                       Gaps
                                                                                                               "Activated murine B lymphocytes and dendritic cells produce a novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostoml;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                        Schaniel C., Pardall E., Sallusto F., Speletas M., Ruedl C., Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 92;
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64.7%; Pred. No. 1.3e-26; Pred. No. 1.3e-26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMALL INDUCIBLE CYTOKINE A22.
BY SIMILARITY.
BY SIMILARITY.
39859881CDAE07CA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Interer.
Interpro; IPR001bil.
Pfam; PP00048; IL8; 1.
SMART; SM00199; SCY: 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
PROSITE; PS00472; Signal; Inflammatory response.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MGD; MGI:1306779; SCya22.
InterPro; IPR00087; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
MEDLINE-9835351; PubMed-9687523;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; AF052505; AAC40200.1; -.
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85 KKLLHKLS 92
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Best Local Similarity
Local 44; Conserve
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POLITZ O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.;
Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.;
Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.;
Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.;
Within the first intron sequence.";
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
--- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES OR GRANUTOCYTES. IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES, HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS AND THUS MAY PLAS AN PROLE IN BOTH HUMORAL AND CELL-MEDIATED
                                                                                                                                   TISSUE-Aorta, and Lung;
MEDINE-97376836; PubMed-9233607;
Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,
Makagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,
Miura R., Opdenakker G., van Damme J., Yoshie O., Nomiyama H.;
"A novel human CC chemokine PARC that is most homologous to
macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for T lymphocytes, but not for monocytes.";
J. Immunol. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-97275308; PubMed-9129202; Wells T.N.C.; Petisch M.C.; "The chemokine information source: identification and characterization of novel chemokines using the WorldWideWeb and expressed sequence tag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE-99168908; PubMed-10049593;
Tasaki Y., Fukuda S., Tio M., Miura R., Imai T., Sugano S., Yoshie O.,
Hughes A.L., Nomiyama H.;
"Chemokine PARC gene (SCYA18) generated by fusion of two
MIP-lalpha/LD78alpha-like genes.";
Genomics 55:353-357(1999).
                                                                                                                                                                                                                                                                                                                                                       MEDLINE-99230488; PubMed-9570561; Kodelja V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerdt S.; "Alternative macrophage activation-associated CC-chemokine-1, a novel structural homologue of macrophage inflammatory protein-1 alpha with J. Immunol. 160:1411-1418(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -1- SUBCELLULAR LOCATION: Secreted.
-1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "A dendritic-cell-derived C-C chemokine that preferentially attracts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Neote K., McColl S.R.;
Genomic organization and biological characterization of the novel
human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18.";
Genomics 56:296-302(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G., Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A., AND CHARACTERIZATION.
MEDLINE-99189237; Pubmed-10087196;
Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
TISSUE-Dendritic cell;
MEDLINE-97336102; PubMed-9192897;
                                                      protein-3 and -4.";
02-APR-1996.
                                                                                                                    SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     databases.";
J. Leukoc. Biol. 61:545-550(1997).
                                   Li H., Ruben S.;
"Macrophage inflammatory
Patent number US5504003,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        naive T cells.";
Nature 387:713-717(1997).
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[1]
SEQUENCE FROM N.A.
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24 GTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKRGRQICADPNKKWVQKY 81
PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES DERIVED FROM PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY PERIPHERAL BLOOD MONOCYTE-TO-MACROPHAGE DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND IL-10. EXPRESSION IS INHIBITED BY IFV-GAMMA WHILE GLUCCOCRTICOIDS EXERT A SLIGHTLY SYNERGISTIC EFFECT IN COMBINATION WITH IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING MONOCYTIC UB37 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI
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15-JUN-2002 (Rel. 41, Last sequence update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha).
SCYAA OR MIPlA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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BY SIMILARITY.
C287B94B9C0518E4 CRC64;
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No. 2.7e-11;
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InterPro; IPRO01811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SmARY; SM00199; SCY; 1.
                                                                                                                                                                                                                                                                                                                                                                                             EMBL; Y13710; CAA74039.1; -.
EMBL; AB012113; BAA34368.1; -.
EMBL; AF082214; AAC32287.1; -.
EMBL; AF082212; AAC32287.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL, AF082213; AAC32287.1; JOINED.
EMBL, AF111198; AAD30390.1; -.
HSSP, P13236; 1HUM.
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STRAIN=CD-1; TISSUE=Lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 40.6 ses 26; Conservative
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SIGNAL 1
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82 ISDL 8
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Matches
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DISULFID
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bloinformatics and the EMBL Outstation the European Bloinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
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Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
"Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel member of rat GRO/CINCs, is a predominant chemokine produced by lipopolysaccharide-stimulated rat macrophages in culture.";
Biochem. Biophys. Res. Commun. 220:945-948(1996).
--- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS, BASOPHILS, AND LYMPHOCYTES, REQUIRED FOR LUNG INJURY AND PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK
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INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                     Shi M.M., Godleski J.J., Paulauskis J.D.;
"Molecular cloning and posttranscriptional regulation of macrophage
inflammatory protein-1 alpha in alveolar macrophages.";
Blochem. Blophys. Res. Commun. 211:289-295(1995).
                                                                                                                                                   STRAIN-LONG EVANS; TISSUE-Lung; MEDLINE-9523896); PubMed-7722328; Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.; Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in acute lung injury in rats."; J. Immunol. 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 92;
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-> W (IN REF. 2 AND 3).
14E861C647F9A2EB CRC64;
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BY SIMILARITY.
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InterPro; IPR001811; Chemokine_IL8.
MEDLINE-95298037; PubMed-7779098
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57
73
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57
10335 MW;
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26; Conservative
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                                                                                                                                SEQUENCE FROM N.A.
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EYITEL
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Matches
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SY04_CHICK STANDARD; PRT; 90 AA.
Q90826; Q910C9;
Q1-NOY-1997 (Rel. 35, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 homolog precursor (Macrophage inflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-Bone marrow;
MEDLINE-95369710; PubMed-7642115;
Petrenko O., Ischenko I., Enrietto P.J.;
IIsolation of a cDMA encoding a novel chicken chemokine homologous to mammalian macrophage inflammatory protein-1 beta.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
-1- SUBCELLULAR LOCATION: Secreted.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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                                                                                                                                                                                                                              Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Petrenko O., Enrietto P.J.;
Submitted (JuL-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: MONONIE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
(BY SIMILARIY).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hughes S.M., Bumstead N.; "Mapping of the gene encoding the chicken homologue of the chemokine SCYA4.";
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50AF9679A267408F CRC64;
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Pred. No. 2.3e-10;
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BY SIMILARITY.
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M -> L (IN REF. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
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HSSP; P13236; 1HUM.
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                                                                                                                                                                         protein 1-beta homolog).
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SMART; SM00199; SCY; 1.
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                                                                                                                                  SYO5_HUMAN STANDARD; PRT; 91 AA.
P13501, 043646; 09NTA2;
01-JAN-1990 (Rel. 13, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
85mall inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta) (T cell-specific protein P228)
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Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C.,
Davis M.M., Krensky A.M.;
                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SYNTHESIS, AND X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
MEDLINE-99111238; PubMed-9889151;
Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H.,
Picard L., Wlodawer A., Lubkowski J., Kent S.B.;
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2eng O.P., Yang R.Y., Fu L.C.;
"The complete sequence of human beta-chemokine RANTES mRNA.";
Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
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"Proton NMR assignments and solution conformation of RANTES,
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Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-95352612; PubMed-7542919;
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MEDLINE-95244456; PubMed-7537088;
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Biochemistry 34:5329-5342(1995).
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                   82 DYMNKM 87
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-!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS. BINDS TO CCR1, CCR3, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT RAWTES PROTEIN INDICES A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, AND SIMIAN -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC). Gaps Hoover D.M., Shaw J., Gryczynski Z., Proudfoot A.E.I., Wells T.N.C., Lubkowski J.; The crystal structure of Met-RANTES: comparison with native RANTES "Total chemical synthesis and high-resolution crystal structure of the potent anti-HIV protein AOP-RANTES."; Chem. Biol. 6:43-51(1999). .; ;; PROSITE; PS00472; SMALL\_CYTOKINES\_CC; 1. Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response; Length 91; 25; Indels SMALL INDUCIBLE CYTOKINE A -> R (IN REF. 1 AND 4). A -> V (IN REF. 4). FBOBFAF9A87C620F CRC64; Score 131; DB 1; Pred. No. 1.5e-09; 17; Mismatches K-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS). InterPro; IPR000827; CC\_chemkine\_sml. InterPro; IPR001811; Chemokine\_IL8. EMBL; AF043341; AAC03541.1; -. EMBL; AF088219; AAC03331.1; -. EMBL; AF266753; AAF7300.1; -. EMBL; BC008600; AAH08600.1; -. EMBL; M21121; AAA36725.1; -. 33.68; 9990 MM; 22; Conservative PDB; 1EQT; 19-APR-00. Genew; HGNC:10632; SCYA5. Pfam; PF00048; IL8; 1. 23 91 57 SMART; SM00199; SCY; 1 PDB; 1HRJ; 14-OCT-96. PDB; 1RTN; 03-JUN-95. PDB; 1RTO; 03-JUN-95. PDB; 1B3A; 23-APR-99. PIR; A28815; A28815 PDB; 1HRJ; 14-OCT-96 Similarity 63 MILNKL 68 EYINSL 88 91 AA; and AOP-RANTES. 3D-structure MIM; 187011; CONFLICT 83 DISULFID SEQUENCE Query Match DISULFID Local SIGNAL Best Loc Matches

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SY12_MOUSE
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         SY03_MOUSE STANDARD; PRT; 92 AA.
P10855; P14096;
01-JUL-1989 (Rel. 11, Created)
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01-APR-1990 (Rel. 14, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (TY-5) (SIS-alpha) (Heparin-binding CHAM) CRANDA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genomic structure of murine macrophage inflammatory protein-1 alpha
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J. Exp. Med. 167:1939-1944(1988).
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; MusinoeL_TaxID=10090;
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"A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
J. Immunol. 142:679-687(1989).
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Wolpe S.D., Davatelis G., Sherry B., Beutler B., Hesse D.G.,
Nguyen H.T., Moddawer L.L., Nathan C.F., Lowry S.F., Cerami A.;
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J. Exp. Med. 167:570-581(1988).
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MEDLINE-91237116; Pubmed-2033269;
Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
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"cDNA sequences of two inducible T-cell genes.";
Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE-89093958; PubMed-2521353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-DBA/2J;
MEDLINE-91016858; PubMed-2216738;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE-89184547; Pubmed-2784565;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunol. 146:4031-4040(1991).
                                                                                                                             Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 24-42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                 REVISIONS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25 PYGAD-TPTACCESYSR-KIPRQFIVDYFETSSLCSQPGVIFLTKRNRQICADSKETWVQ 82
                                                                                             -!- SUBGELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SY12_MOUSE STANDARD; PRT; 104 AA.
062401; 090YD6;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine Al2 precursor (CCL12) (Monocyte chemotactic SCR12 OR MCP-5) (MCP-1 related chemokine).
                          PROPERTIES. HAS A POTENT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS. BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
FUNCTION: MONOKINE WITH INFLAMMATORY, PYROGENIC AND CHEMOKINETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ä
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Pfam: PF00048; ILB; 1.

PFAM: PS00199; SCY; 1.

PS00472; SMALL_CYTOKINES_CC; 1.

PS00472; SMALL_CYTOKINES_CC; 1.

PS00472; SMALL_CYTOKINES_CC; 1.

PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F -> L (IN REF. 3).
V -> A (IN REF. 3).
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BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL, X12531, CAA31047.1, EMBL, X53372, CAA37452.1; EMBL, J04491, AAA40304.1, EMBL, M73061, AAA39707.1, EMBL, AF065939, AAC17506.1, EMBL, AF065941, AAC17507.1, EMBL, AF065941, AAC17509.1, EMBL, AF065942, AAC17509.1, EMBL, AF065943, AAC17510.1, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62
10345 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; M23447; AAA40146.1; -.
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Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL, AF065940, AACLT
EMBL, AF065941; AACLT
EMBL, AF065942; AACLT
EMBL, AF065943; AACLT
PIR; A27596; A27596.
PIR; A30552; A30552.
PIR; A305433; S04533.
PIR; S04533; PIR; S11685.
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                                                                               NEUTROPHILS.
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CONFLICT
CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBUNIT: HOMODIMER (BY SIMILARITY).
SUBCELLULAR LOCATION: SECRETEGO.
THOMOSE SPECIFICITY: PREDOMINARLY EXPRESSED IN THE LYMPH NODES AND THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES, BRAENY. HEARTY. LOUNG, BRAIN. SMALL INVESTIRE, KIDNEY AND COLON.
INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE=97149438; PubMed=8996246; Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.; Murine monocyte chemoattractant protein (MCP)-5: a novel CC chemokine that is a structural and functional homologue of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Sequence polymorphisms in the chemokines Scyal (TCA-3), Scya2 (monocyte chemoattractant protein (MCP)-1), and Scyal2 (MCP-5) are candidates for eac7, a locus controlling susceptibility to monophasic remitting/nonrelapsing experimental allergic encephalomyelitis."; J. Immunol. 163:2262-2286(1999).
--- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES, AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTERY MONOCYTE ACTIVE CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC INTELAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A PLYOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.
                                                                                                                                                           Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C., Wershil B.K., Gutierrez-Ramos J.C.;
"Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation."; J. Exp. Med. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-B10.S/J, BALB/C, DBA/2J, NOD/LTJ, and SJL/J; TISSUE-Spleen; BIDLINE-99370037; PubMed-10438970; Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W., Blankenhorn E.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMALL INDUCIBLE CYTOKINE A12.
BY SIMILARITY.
BY SIMILARITY.
QTFILEPSCLG -> FT (IN STRAIN SJL/J).
8D102F4FF4CC3DBF CRC64;
Mammalia; Eutheria; Rodentia; Sciuroquathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Signal; Inflammatory response.
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InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                MEDLINE-97079149; PubMed-8920881;
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EMBL; AF065935; AAF15385.1; --
EMBL; AF065936; AAF15386.1; --
EMBL; AF065937; AAF15387.1; --
EMBL; AF065938; AAF15388.1; --
HSSP; P13500; 1DOL.
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EMBL; U66670; AAB49424.1; -.
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11659
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                                  NCBI_TaxID=10090
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                                                                        13 CCRDYVRYRLPLRVVKHF-YWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ 70
                                                                                                        91
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-!- TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Krensky A.M., Neilson E.G.; ^{\circ} Isolation and characterization of cDNA from renal tubular epithelium
                                                                                             Gaps
                                                                                                                                                                                                                                      (Rel. 26, Created)
(Rel. 29, Last sequence update)
(Rel. 41, Last annotation update)
tble cytokine A5 precursor (CCL5) (T-cell specific RANTES)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=NIH Swiss;
MEDLINE=94132613; PubMed=7507961;
Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
"Cloning, genomic organization, and chromosomal localization of the Scya5 gene encoding the murine chemokine RANTES.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ma R.2., Teuscher C.;
Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS.
                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5′-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Schall T.J., Simpson N.J., Mak J.Y.; Molecular cloning and expression of the murine RANTES cytokine: "Molecular cloning and expression of the murine and functional conservation between mouse and man."; Eur. J. Immunol. 22:1477-1481(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Definition of a lipopolysaccharide-responsive element in the flanking regions of MuRantes and crg-2.";
Mol. Cell. Biol. 14:2914-2925(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N., Paznekas W.A.;
 Length 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-BALB/CJ, B10.S/J, NOD/LTJ, and SJL/J; TISSUE-Spleen;
                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
 DB 1;
                 .7e-09
                                                                                                                                                                                                      ¥
                                    1.1; Mismatches
33.2%; Score 129.5; 42.4%; Pred. No. 2.7.
                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=92277990; PubMed=1375672;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=BALB/c;
MEDLINE=94217689; PubMed=7513046;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immunol. 152:1182-1189(1994).
                                                                                                                                                                                                                                                                                                                 protein) (SIS-delta) (MuRantes).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       encoding murine Rantes.";
Kidney Int. 41:220-225(1992).
                                      Conservative
                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse)
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                   Best Local Similarity
Matches 25, Conser
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                                                                                                                                                                                                                                                                                              Small inducible
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01-JUN-1994
                                                                                                                                                                                                                                                                              15-JUN-2002
                                                                                                                                                                                                      SY05_MOUSE
P30882;
   Query Match
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Lusso P.
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EMBL;
  requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25 PYGS--DTTPCCEAYLSLALPRAHVKEYFYTSSKCSNLAVVFVTRRNRQVCANPEKKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2012 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (Tonsillar lymphocyte LD78 alpha protein) (GOGIS switch regulatory protein 19-1) (GOSI9-1 protein)
(SIS-beta) (PAT 464.1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDINE-89140147; PubMed-2521882; Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.; "Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of
                                                                                                                                                                                                         EMBL: ...

RESP: P13501; 1RTN.

RESP: P13501; 1RTN.

RESP: RGD: 8C262; SC785.

RESP: RGD: RGI:98262; SC785.

RESP: RGD: RGI:98262; CC_chemkine_sml.

DR InterPro; 1PR000827; CC_chemkine_LL8.

DR Pfan; PF00048; LL8; 1.

DR SMART; SM00199; SC7; 1.

DR ROSITE; P500472; SMALL_CYTOKINES_CC; 1.

DR PROSITE; P500472; SMALL_CYTOKINES_CC; 1.

FT SIGNAL 1 23 SMALL INDUCIBLE CYTOKINE A5.

FT CHAIN 24 91 SMALL INDUCIBLE CYTOKINE A5.

FT CHAIN 33 57 BY SIMILARITY.

TSTILEID 33 57 BY SIMILARITY.

A (IN REF. 2).
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Subaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-86223879; PubMed=3086300;
Obaru K., Fukuda M., Maeda S., Shimada K.;
"A cDNA clone used to study mRNA inducible in human tonsillar Lymphocytes by a tumor promoter.";
J. Biochem. 99:885-894(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33.1%; Score 129; DB 1; Length 91; 36.4%; Pred. No. 2.7e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T -> A (IN REF. 2).
A -> E (IN REF. 1).
5DFD66F4684FE1C8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Pred. No. 2.7e
15; Mismatches
                     or send an email to license@isb-sib.ch).
                                                     EMBL; M77747; AAA40029.1; -
EMBL; S37648; AAB22330.1; -
EMBL; U02298; AAA18302.1; -
EMBL; X70675; CAA50011.1; -
EMBL; AF065944; AAC17511.1; -
EMBL; AF065946; AAC17513.1; -
EMBL; AF065946; AAC17513.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      secreted factors.";
J. Immunol. 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10071 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63 MILNKL 68
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P10147:
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CONFLICT
CONFLICT
SEQUENCE
  entities
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=96127782; PubMed=8541527;
MEDLINE=96127782; PubMed=8541527;
Hunter M.G., Bawden L., Brotherton D., Craig S., Cribbes S.,
Czaplewski L.G., Dexter T.M., Drummond A.H., Gearing A.H.,
Heyworth C.M., Lord B.I., Mccourt M., Varley P.G., Wood L.M.,
Edwards R.M., Lewis P.J.;
"BB-10010: an active variant of human macrophage inflammatory protein-
1 alpha with improved pharmaceutical properties.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LUGSOC FARTES, MIP-1 alpha, and MIP-1 beta as the major "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."; Science 270: 1811-1815 (1995).

-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.

-!- FUNCTION: MONOKINE WITH INFLAMMATORY ENCOMBINANT MIP-1-ALPHA INDUCES A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, AND SIMIAN IMMUNODEFICIENCY VIRUS (SIV).

-!- SUBCELLULAR LOCATION: Secreted.

-!- SUBCELLULAR LOCATION: Secreted.

-!- INDUCTION: BY TPA OR PHA (TPA = 12-0-TETRADECANOXL PHORBOL-13 ACCETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MITGGEN)).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C.C.) (CHEMOKINE CC). STRONG, TO SCYA3L1.
MEDLINE-91103879; PubMed-2271120;
Blum S., Forsdyke R.E., Forsdyke D.R.;
"Three human homologs of a murine gene encoding an inhibitor of stem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 27-40 AND 71-83, AND FUNCTION.
MEDLINE-96106406; PubMed-8525373;
Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
                                                                                                                                                                                                                                                                                                                         Nakao M., Nomiyama H., Shimada K.; "Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases
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InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
SMART; SM00472; SMALL_CYTOKINES_CC; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Inflammatory response; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mol. Cell. Biol. 10:3646-3658(1990).
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EMBL, M25315, AAA57255.1; --
EMBL, X03754; CAAA27388.1; --
EMBL, X04018; CAA2748.1; --
EMBL, M23178; AAA35858.1; --
EMBL, M23178; AAA3588.1; --
                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE-90287155; Pubmed-1694014;
                                                                                                                                                            DNA Cell Biol. 9:589-602(1990).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 23-92 FROM N.A.
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PIR; A30574; A30574.
HSSP; P13236; 1HUM.
                                                                                                                                proliferation.
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                                                                                                                                                        SVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 68
                                                                                                                                                                        SUBCELLULAR LOCATION: Secreted.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTCKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK
                                                                                                                                Gaps
                                                                                                                                                                                                                                                                       01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Métazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYtokine; Chemotaxis; T-cell; Signal; Inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33.1%; Score 129; DB 1; Length 92; 36.4%; Pred. No. 2.7e-09; tive 15; Mismatches 25; Indels
                                                                                                        Length 92;
              INDUCIBLE CYTOKINE A3.
                                                    D->A: IN BB-10010; IMPROVED
                                                                                                                                24; Indels
                                                                PHARMACEUTICAL PROPERTIES. 517865D5D6776CA8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMALL INDUCIBLE CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B4FBEC2B4208ABC6 CRC64;
                                                                                                      ; Score 129; DB 1;
; Pred. No. 2.7e-09;
14; Mismatches 24;
                                                                                                                                                                                                                                                   92 AA.
             SMALL INDUCIBE
BY SIMILARITY.
BY SIMILARITY.
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BY SIMILARITY
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POTENTIAL.
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InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
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                                                                             10085 MW;
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                                                                                                      33.1%;
34.5%;
                                                                                                                                Conservative
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                                                                                                                                                                                                                                                 STANDARD;
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 23
92
73
49
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SMART; SM00199; SCV: 1
                                                                                                                                                                                                                                                                                                                             protein) (SIS-delta).
                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE. FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                             92 AA;
                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=10116;
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P50231;
                         DISULFID
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SIGNAL
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Matches
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                                                            01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 precursor (CCL4) (Macrophage inflammatory protein 1-beta) (MIP-1-beta).
                                                                                                                                                                                                                                              SERAIN-LONG EVANS; TISSUE-LUNG;
STRAIN-LONG EVANS; TISSUE-LUNG;
Jones M.L., Shanley T.P., Schmal H., Friedl H.P., Ward P.A.;
Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-!- SUBJUIT: HOWODIMER (BY SIMILARITY).
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK
                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SY14_HUMAN STANDARD; PRT; 93 AA.
01657; 013954;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A14 precursor (CCL14) (Chemokine CC-1/CC-3)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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BY SIMILARITY.
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BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 128.5; DB 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 3.2e); Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
                                 PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92 AA; 10234 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                 STANDARD;
                                                                                                                                                                  Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytokine; Chemotaxis; SIGNAL 1 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMART; SM00199; SCY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00048; IL8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 26; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 MILNKL 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EYVNDL 89
                                                                                                                                                                                                                  NCB1_TaxID=10116;
                               SY04_RAT
P50230;
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RESULT 12
               SY04_RAT
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                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDILINE-99228475; PubMed-10213461;
MODILYAMA H., Flwida S., Iio M., Tanase S., Miura R., Yoshie O.;
Momilyama H., Flwida S., Iio M., Tanase I., Miura R., Yoshie O.;
"Organization of the chemokine gene cluster on human chromosome
"Organization of the genes for CC chemokine MPIF-1, HCC-2, LEC, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Interferon Cytokine Res. 19:227-234(1999).

-1 FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA RECEPTORS THAT ALEASO RECOGNIZE MIPH. ALPHA. IT INDUCED INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS, AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.

-1 SUBCELLULAR LOCATION: Secreted.
-1 ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARE PRODUCED BY ALTERNATIVE SPLICING.
-1- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL TISSUES SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL TISSUES: SPEECH, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE MARROW, PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                               Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
"HCC-2, a human chemokine: gene structure, expression pattern, and
                                                                                                                 TISSUE-Bone marrow;
MEDLINE-96136773; PubMed-8551235;
Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y.,
Kubbles M., Tomeczkowski J., Kirchhoff K., Raida M., Adermann K.,
Kist A., Reinecke M., Sillard R., Pardigol A., Uguccioni M.,
Raggidolin M., Forssmann W.-G.;
"HCC-1, a novel chemokine from human plasma.";
                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SMALL INDUCIBLE CYTOKINE A14
                                                                                                                                                                                                                                                                                                                                          biological activity.";
Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
                                                                                                     SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. Cytokine; Signal; Alternative splicing. SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000827; CC_chemkine_sml
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IPR001811; Chemokine_IL8.
                                                                                                                                                                                                                                                                                MEDLINE-98263352; PubMed-9600961;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AF088219; AAC63329.1; -- AF088219; AAF23982.1; --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; Z49270; CAA89264.1; -. EMBL; Z70292; CAA94307.1; -. EMBL; Z70293; CAA94309.1; -. EMBL; Z49269; CAA89263.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HGNC:10612; SCYA14.
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SMART; SM00199; SCY; 1
                             Homo sapiens (Human).
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                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                         NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MIM; 601392;
                                                                                                                                                                                                                                                                     TISSUE-Liver
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8). Viruses; dsDNA viruses, no RNA stage; Herpesviridae; Gammaherpesvirinae; Rhadinovirus.
                                                                                                                                                                                                                          Gaps
                                                          -> QTGGKPKVVKIQLKLVG (IN ISOFORM HCC-
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MEDLINE-20496762; PubMed-11041848;
Fernandez E.J., Wilken J., Thompson D.A., Peiper S.C., Lolis E.;
"Comparison of the structure of vMIP-II with ectaxin-1, RANTES, and
MCP-3 suggests a unique mechanism for CCR3 activation.";
Biochemistry 39:12837-12844(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Viral macrophage inflammatory protein-II precursor (vMIP-II) (vMIP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-97094384; PubMed-8939871;
Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
"Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
"Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Clufo I Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.; Kaposi's sarcome-associated human herpesvirus-8 encodes homologs of macrophage inflammatory protein-1 and interleukin-6."; Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRUCTURE BY NMR.
MEDLINE-20060979; Pubmed-10595530;
Liwang A.C., Wang Z.X., Sun Y., Peiper S.C., Liwang P.J.;
"The solution structure of the anti-HIV chemokine vMIP-II.";
Protein Sci. 8:2270-2280 (1999).
                                                                                                                                                                     Length 93;
                                                                                                                                                                                                                          29; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sun R., Lin S.-F., Miller G.;
Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                DDDB899DC9148836 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
                                                                                                                                                            ; Score 126; DB 1;
; Pred. No. 6.5e-09;
15; Mismatches 29
BY SIMILARITY.

BY SIMILARITY.

R -> QTGGKPKVVK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94 AA.
                                                                                                                                                               32.3%; Score 126;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence)
                                                                                                                10678 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Science 274:1739-1744(1996).
                                                                                                                                                                                                 30.48;
                                                                                                                                                                                                                          21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                    62 KMILNKLSQ 70
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                                                                                                                                                                                              Similarity
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                                                                                                                93 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VMI2_KSHV · 098157;
  DISULFID
                                                                                                                SEQUENCE
                                                        VARSPLIC
                                                                                                                                                                     Query Match
                                                                                                                                                                                                 Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
IMMUNODEFICIENCY VIRUS TYPE 1 (HIV-1) STRAINS. THIS OCCURS BECAUSE WIP-II BINDS TO A WIDE RANGE OF CHEMOKINE RECEPTORS. MAY FORM PART OF THE RESPONSE TO HOST DEFENSES CONTRIBUTING TO VIRUS-INDUCED NEOPLASIA AND MAY HAVE RELEVANCE TO KSHV AND HIV-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SY15 HUMAN STANDARD: PRT; 113 AA. 01665; 09UM74; 01.NOV-1997 (Rel. 35, Created) 01-NOV-1997 (Rel. 35, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Small inductble cytokine Al5 precursor (CCL15) (Macrophage inflammatory protein 5) (MIP-5) (Chemokine CC-2) (HCC-2) (NCC-3) (MIP-5) CKNI5 OR MIP5 OR NCC3.
                                                       SUBUNIT: MONOMER.
SUBCELLULAR LOCATION: Secreted.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                           VIRAL MACROPHAGE INFLAMMATORY PROTEIN-II.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pardigol A., Forssmann U., Zucht H.-D., Loetscher P., Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.; H.CC-2, a human chemokine: gene structure, expression pattern, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                    Length 94;
                                                                                                                                                                                                                                                                                                                                                                                            10486 MW; 44F749BED18DD128 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                biological activity.";
Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                   32.1%; Score 125; DB 1;
39.3%; Pred. No. 8.8e-09;
tive 12; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A., AND CHARACTERIZATION.
                                                                                                                                                                                                                                                                                                                      PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Signal; 3D-structure.
SIGNAL
                                                                                                                                                                                                      EMBL; U67775; AAB61702.1; -.
EMBL; U75698; AAC57093.1; -.
EMBL; U93872; AAB62642.1; -.
EMBL; U71365; AAC34941.1; -.
PDB; ICM9; 24-JUN-99.
PDB; IVMP; 24-NOV-99.
InterPro; IPRO00827; CC_chemkine_sml.
InterPro; IPRO01811; Chemokine_ILB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-98263352; PubMed-9600961;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                          C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                  Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Human)
                                                                                                                                                                                                                                                                                                                                                          21
34
35
94 AA;
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22; Conserv
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                                             INTERACTIONS
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SEQUENCE
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                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE-99228475; PubMed-10213461;
Nomiyama H., Fukuda S., Ilo M., Tanase S., Miura R., Yoshie O.;
Nomiyama H., Fukuda S., Ilo M., Tanase S., Miura R., Yoshie O.;
"Organization of the chemokine gene cluster on human chromosome
17411.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and
RANTES.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADRENAL GLAND. LOWER LEVELS IN PLACENTA, LIVER, PANCREAS AND BONE MARROW.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE SPECIFICITY.

MEDLINE-98226667; PubMed-9558365;

Youn B.-S., Zhang S.M., Broxmeyer H.E., Cooper S., Antol K.,
Fraser M. Jr., Kwon B.S.;
"Characterization of CKbeta8 and CKbeta8-1: two alternatively spliced forms of human beta-chemokine, chemoattractants for neutrophils, monocytes, and lymphocytes, and potent agonists at CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. Koun B.S.; Youn B.S.; Youn B.S.; Youn B.S.; Youn B.S.; John and characterization of a human chemokine cDNA, hmrp-2b."; Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blood 91:3118-3126(1998).

-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS T CELLS AND MONOCYTES, BUT NOT NEUTROPHILS, EOSINOPHILS, OR B CELLS. ACTS MAINLY VIA CC CHEMOKINE EXCEPTOR CCR1. ALSO BINDS TO CCR3.

-1- SUBCELLULAR LOCATION: Secreted.
-1- TISSUE SPECIFICITY: MOST ABUNDANT IN HEART, SKELETAL MUSCLE AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-98208236; PubMed-9548457;
MEDLINE-98208236; PubMed-9548457;
Youn B.-S., Zhang S.M., Lee E.K., Park D.H., Broxmeyer H.E.,
Murphy P.M., Locati M., Peass J.E., Kim K.K., Antol K., Kwon B.S.;
"Molecular cloning of leukotectin-1: a novel human beta-chemokine, chemoattractant for neutrophils, monocytes, and lymphocytes, and a potent agonist at CC chemokine receptors 1 and 3.";
Wang W., Bacon K.B., Oldham E.R., Schall T.J.;
"Molecular cloning and functional characterization of human MIP-1 delta, a new C-C chemokine related to mouse CCF-18 and C10.";
J. Clin. Immunol. 18:214-222(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 12-113 FROM N.A. Coulin F., Power C.A., Alouani S., Peitsch M.C., Schroeder J.-M. Moshizuki M., Clark-Lewis I., Wells T.N.C.; Submitted (JAN-1997) to the SWISS-PROT data bank.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIANE-97275308; PubMed-9129202; Wells T.N.C., Peitsch M.C.; "The chemokine information source: identification and characterization of novel chemokines using the WorldWideWeb and

    Interferon Cytokine Res. 19:227-234(1999).

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J. Leukoc. Biol. 61:545-550(1997).
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Search completed: July 28, 2003, 04:01:12 Job time: 3.67647 secs

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July 28, 2003, 03:58:28; Search time 12.9412 Seconds (without alignments) 1114.528 Million cell updates/sec
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390
1 LGPYGANMEDSVCRDYVRY.....EICADPRVPWVKMILNKLSQ 70
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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#### sp\_unclassified:\* sp\_human:\* sp\_invertebrate:\* sp\_mammal:\* sp\_rodent:\* sp\_virus:\* sp\_vertebrate:\* sp\_rvirus:\* sp\_bacteriap:\* sp\_archeap:\* : sp\_archea:\* : sp\_bacteria:\* sp\_organelle:\* sp\_plant:\* sp\_fungi:\* sp\_phage: \* sp\_mhc:\*

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SPTREMBL\_21:\*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES	rth DB ID Description	81 11 090zul rattus norv	091zh5	09qzu2	098158	91 13 080G57 0811us gall	091210	89 13 Q918E0 G918e0 G918e0 G911us G911	10		90 13 Q910C9 qallus qall		92 6 Q8SQ40 Q8sq40 felis silve		91 11 Q91ZL1 sigmodon hi		
ď	Query Match Length DB	69.5	69.5	68.7	39.2	36.7	36.5	36.4	35.6	35.5	35.3	32.4	32.3	31.3	30.6	30.0	
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62 KMILNKLS 69

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Query Match 69.5%; Score 271; DB 11; Length 81; Best Local Similarity 66.2%; Pred. No. 6.4e-28; Matches 45; Conservative 14; Mismatches 9; Indels

O9vuz6 mus musculu O9r043 mus musculu O95689 homo sapien O95080 canis famil O9gyd7 mus musculu O9ere0 rattus norv 09d830 mus musculu O95md5 bos taurus O99m24 mus musculu O92292 cricetulus O9tx56 bos taurus O9tx66 bos taurus O9tx61 equus cabal O91v84 mus musculu O9tx71 equus cabal O91v81 macaca mula O9tx13 equus cabal O9tx13 equus cabal O9tx13 equus cabal O9tx142 equus cabal O9tx142 equus cabal O9tx16 macaca mula O9tx17 macaca mula O9tx18 paralichthy O90ty59 paralichthy O90ty69 paralichthy O90ty60 oncorhynchu O9ptv6 oncorhynchu	PRT; . 81 AA.  reated) ast sequence update) ast annotation update) (Fragment).  Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rattus. =THYMUS; :aport C.J., Epp A., Romagnani S., :is localized to thymic medullary :tactic for CD3+, CD4+, CD8+/
09WUZ6 09R043 095689 0955801 0995807 096830 099830 099824 089824 099704 091703 091703 097703 097703 097703 097703 097704 097704 097704 097704 097704 097704 097707 097707 097707 097707 097707 097707 097707 097707 097707 097707 097707 097707	PRELIMINARY; PRT; 81 AA.  (TrEMBLrel. 13, Last sequence upda (TrEMBLrel. 17, Last annotation updactived chemokine (Fragment).  egicus (Rat).  egicus (Rat).  Guelaca Chordata; Craniata; Vertek Matezaca; Chordata; Craniata; Vertek Mutheria; Rodentia; Sciurognathi; Mutheria; Rodentia; Sciurognathi; Mutheria; Rodentia; Sciurognathi; Mutheria; Romagnani P., Raport C.J., Epp & derived chemokine is localized to cells and is chemotactic for CD3+, (1999).  "; 1099).  "; 1099).  "; 1099; 11.  "; 1099; 20; 11.  "; 1099; 20; 11.  "; 1099; 20; 11.  "; 1099; 20; 11.
111 111 111 111 111 111 111 113 113 113	; 13, 13, 13, 13, 13, 17, 17, 17, 18, 10, 11, 11, 11, 11, 11, 11, 11, 11, 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
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                                                                                                                                      Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S.,
Gray P.W.;
                                                                                                                                                                                                                                                                                                                                                                                                             Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Indels
                                                                                                                                                                                                                                                                                                      glomerulonephritis.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF432871; AAL30397.1;
Interpro; IPRO1811; Chemokine_IL8.
Pfam; PF00048; IL8; IL
SEQUENCE 92 AA; 10420 MW; CBC88124502EFC0C CRC64;
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A; 10331 MW; 17FE31A87F352E63 CRC64;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-UON-2002 (TrEMBLrel. 21, Last annotation update)
Macrophage-derived chemokine.
                                                            (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                            Score 271; DB 11;
Pred. No. 7.2e-28;
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                                 92 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               thymocytes.";
Blood 0:0-0(1999).
EMBL, AP163476; AAD55763.1; -.
HSSP, 098157; 1CM9.
MCD; MGI:1306779; Scya22.
InterPro: IPR001811; Chemokine_IL8.
Pfam; PP00048; IL8, 1.
SMART; SM00199; SCY; 1.
SEQUENCE 92 AA; 10331.MW; 17F831P
                                                                                                        Macrophage-derived chemokine CCL22
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                               PRELIMINARY;
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Best Local Similarity
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                                                                                                                                                                               NCBI_TaxID=10116;
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                                                             01-DEC-2001
                                                                          01-DEC-2001
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                                                                                                                                     2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
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Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).

Viruses; dsDNA viruses, no RNA stage; Herpesviridae;

Gammaherpesvirinae; Rhadinovirus.

NCBI_TaxID-37296;
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BEDLINES-19094381, Dubmed-8939871; Moore P.S., Bashoff C., Weiss R.A., Chang Y.; Moore p.S., Bashoff C, Weiss R.A., Chang Y.; Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDILINE-91121480; MEDILINE-91121480; Pubmed-8962146; Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S., Submitted (MAX-1997) to the EMBL/GenBank/DDBJ databases.
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   Length 92;
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Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases.
EMBL; U78698; AAC57095.1; -
EMBL; U74585; AAB61704.1; -
EMBL; U3872; AAB62671.1; -
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Sun R., Lin S.-F., Miller G.;
Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-FEB-1997 (TrEMBLrel. 02, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
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68.7%; Score 268; DB 11;
64.7%; Pred. No. 1.8e-27;
ive 15; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genes by KSHV.";
Science 274:1739-1744(1996).
                                                                           44; Conservative
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85 KKLLHKLS 92
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                                     Best_Local Similarity
Matches 44; Conserv
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Sigmodon hispidus (Hispid cotton rat)
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                                                                                                                                                                                                                                                                                                    Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                             Gaps
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                                                                                                                                                  13 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 68
                                                                                                                                                               Sigmodon hispidus (Hispid cotton rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
                                                                                                                                                                                                                                                                                                                                                                                  MEDINE-21655115; PubMed-11797102;
WHORS S., Haynes A., O'Regan M., Bunstead N.;
Identification, mapping, and phylogenetic analysis of three novel chicken CC chemokines.";
Imunogenetics 53:674-683(2001).
EMBL; AY037859; AAR4312.1: SEOUENCE 91 AA: 10154 MW; 744A64BB229194EF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. Blanco J.C., Pletneva L.M., Prince G.A.; Blanco hispidus cytokines, chemokines and interferons."; Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                      Length 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36.7%; Score 143; DB 13; Length 9 39.4%; Pred. No. 4.2e-11; Live 16; Mismatches 22; Indels
                                                                                                    ; Score 153; DB 12; Length 9; Pred. No. 2.2e-12; 17; Mismatches 15; Indels
                               InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; IL8; 1.
SMART, SM00199; SCY; 1.
Hypothetical protein.
SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    091ZL0 PRELIMINARY; PRT; 92 AA.
091ZL0;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Macrophage inflammatory protein 1 beta.
                                                                                                                                                                                                                                                      01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Chemokine ah294
                                                                                                                                                                                                                                 91 AA
                                                                                                                                                                                                                                  PRT;
                                                                                                      39.2%;
42.9%;
EMBL; U71366; AAC34943.1; -. EMBL; U50138; AAD11536.1; -. HSSP; Q98157; 1VMP.
                                                                                                                            24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 Similarity 39.49
                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                 Similarity
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Best Local (
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Best Local
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Q91ZL0
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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                                                                                                                                   36.5%; Score 142.5; DB 11; Length 92; 43.9%; Pred. No. 5e-11; tive 8; Mismatches 28; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36.4%; Score 142; DB 13; Length 89; 30.9%; Pred. No. 5.6e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
LINEAFPO, TRRONOBLY, CC_Chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Pfam, PF00148; ILB; I.
PROSTIE: PS00442; SMALL_CYTCKINES_CC; UNKNOWN_1.
SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHEMOKINE K203. 6FA2EA7A4950CA75 CRC64;
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DBC-2002 (TrEMBLrel. 20, Last annotation update)
MACIOPhage inflammatory protein-1 alpha.
MIPI ALPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last sequence update)
Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=20170941; PubMed=10704244; Sick C., Schneider K., Staehell P., Wein "Novel chicken CXC and CC chemokines."; Cytokine 12:181.186(2000).
EMBL; Y18692; CAB70956.1; -. HSSP; P13236; IHUM.
InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-0CT-2000 (TrEMBLrel. 15, 01-0CT-2000 (TrEMBLrel. 15, 01-DEC-2001 (TrEMBLrel. 19, Chemokine K203 precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            89 AA; 9896 MW;
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                                                                                                                                                          Best Local Similarity 43.9
Matches 29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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PŘT;

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PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                82 DYMNKM 87
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                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                            NCBI_TaxID=9031;
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                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAGNORMS FAVA.

Hughes S.M., Bunstead N.;

Hughes S.M., Bunstead N.;

Mapping of the gene encoding the chicken homologue of the mammalian chemokine SCTA4.";

Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.

EMBL; AF146730; AAD48772.1; -..

EMBL; AF146730; AAD48772.1; -..

InterPro; IPR000827; CC_chemkine_sml.

InterPro; IPR001811; Chemokine_ILB.

Ffan; PF00048; ILB; 1.

SMART; SW00199; SCY; 1.

PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

SRACTS SEQUENCE 90 AA; 9986 MW; 50AF9679A2675ICB CRC64;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
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                                                  Blanco J.C., Pletneva L.M., Prince G.A.;
Blanco J.C., Pletneva L.M., Prince G.A.;
"Sigmodon hispidus cytokines, chemokines and interferons.";
"Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AY059407; AAL26704.1;
"InterPro; IPR001811; C.C.chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 92 AA; 10334 MW; CF9AAB3D94DCAF79 CRC64;
                                                                                                                                                                                      Length 92;
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37.9%; Pred. No. 1.6e-10;
Live 15; Mismatches 25; Indels
                                                                                                                                                                                                             23; Indels
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Last sequence update)
Last annotation update)
                                                                                                                                                                                     Score 139; DB 11;
Pred. No. 1.4e-10;
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37.9%; Pred. No. 1...
ina 16; Mismatches
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                                                                                                                                                                                                  Local Similarity
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                 NCBI_TaxID-42415;
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Q910C9
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Q9PWA6
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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                                                                                                                                                                                                                                                                                                                                                                            Hughes S.M., Bumstead N.;
"Mapping of the gene encoding the chicken homologue of the mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutharia; Cetartiodactyla; Ruminantia; Pecora; Bovoldea; Bovinae; Bos. (NCBI_TaxID=9913;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     35.3%; Score 137.5; DB 13; Length 37.9%; Pred. No. 2.2e-10; ive 14; Mismatches 26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                            chemokine SCYA4.;
Submitted (JUN.1999) to the EMBL/GenBank/DDBJ databases.
EMBL, A243034.; CAB45103.1;
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR01811; Chemokine_ILB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Werling D.;
"Role of chemokines in RSV infection.";
"Role of chemokines in RSV infection.";
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
Submitted (JAN-2002). A JUNE WAL/BOSO.1;
SEOURNCE 93 AA; 10118 MW; 1266BFBFCEE5E8E9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS0048; ILB; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 90 AA; 9987 MW; 50AF9679A267408F CRC64;
                                               01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Macrophage inflammatory protein 1-beta.
SCYA4.
Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01.JUN-2002 (TrEMBLrel. 21, Created)
01.JUN-2002 (TrEMBLrel. 21, Last sequence update)
01.JUN-2002 (TrEMBLrel. 21, Last annotation update)
Macrophage inflammatory protein-1 alpha.
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33.3%; Pred. No. 6.3e-09;
ive 17; Mismatches 26
90 AA.
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Matches 25; Conservative
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Best Local Similarity 33.3%
Matches 22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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RESULT 12

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7 NMEDSV-CCRDYVRYRLPLRYVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMIL 65
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     Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 11; Length 91;
                                                                                    Blanco J.C., Pletneva L.M., Prince G.A.;
"Sigmodon hispidus cytokines, chemokines and interferons.";
"Sigmodon hispidus cytokines, chemokines and interferons.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AR421391; AAL16932.1: .
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam, PF00048; IL8; IL.
PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 91 AA; 10082 MW; DODGEAEABE422FF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NAR-2002 (TrEMBLrel. 20, Last annotation update)
LD78 alpha beta precursor (Fragment)
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                  .1e-08;
es 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22;
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; Pred. No. 9.6e-08;
12; Mismatches 22.
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LD78 ALPHA BETA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80 AA.
                                                                                                                                                                                                                                                                Query Match 30.6%; Score 119.5; Best Local Similarity 36.5%; Pred. No. 5.1e Matches 23; Conservative 15; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search completed: July 28, 2003, 04:02:52 Job time: 12.9412 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 34.6'
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
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SMART; SM00199; SCY; 1.
                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80 AA;
                                     NCBI_TaxID=42415;
                                                                                                                                                                                                                                                                                                                                                                                                         66 NKL 68
                                                                                                                                                                                                                                                                                                                                                                                                                                         86 NYL 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-BRAIN;
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SEQUENCE
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SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                         3 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : || | ::| | ::| | ::| | 32 TACCESYTSRQIPQNFIADYFETSSQCSKPSVIFLTKRGRQVCADPSEEWVQKYVSDL 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 SVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 68
                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sigmodon hispidus (Hispid cotton rat).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Similar to small inducible cytokine A3 (homologous to mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 31.3%; Score 122; DB 4; Length 93; Best Local Similarity 32.8%; Pred. No. 2.4e-08; Matches 19; Conservative 14; Mismatches 25; Indels
                                                                                                                                                                                                                                                                                                                                                 32.3%; Score 126; DB 6; Length 92; 35.0%; Pred. No. 7.2e-09; tive 17; Mismatches 20; Indels
                                                                                                                                                                                                                          SEQUENCE FROM N.A.

Kimura T., Kano R., Hasegawa A.;

Kimura T., Kano R., Hasegawa A.;

"molecular cloning of feline RANTES gene.";

Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AB084349; BAB8940.1; -.

SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strausberg R.;
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC007783; AAH07783.1; -.
InterPro; IPR000827; CC_Chemkine_sml.
InterPro; IPR001831; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 93 AA; 10144 MW; A7A78E374006D61E CRC64;
                                                                                                                                       Felis silvestris catus (Cat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalla; Eutheria; Carnivora; Fissipedia; Felidae;
                                                                        Last sequence update)
Last annotation update)
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
RANTES chemokine.
                   92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93 AA.
                                                      Created)
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                                                01-JUN-2002 (TrEMBLrel. 21, 01-JUN-2002 (TrEMBLrel. 21, 01-JUN-2002 (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                                                                                                                     21; Conservative
                   PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
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                                                                                                      RANTES protein.
RANTES.
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Q8SQ40
ID Q8SQ40
AC Q8SQ40;
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Q91ZL1;
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Q96168
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Q91ZL1
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                                                                             11 SVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWVK 62
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                                                                                              Length 80;
8B509EB15648E971 CRC64;
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÷ 4  Human chemokine pr Macrophage-derived Macrophage-derived

AAW40811 AAY26175 AAY05871 AAY06829 AAB076829 AAB076829 AAB076829 AAY05878

Amino acid

00000000000000000000000000000000000000	374 97. 374 97. 369 96. 369 96. 369 96. 368 96. 365 95. 350 91.	91. 89. 89. 67.		RESULT 1 AAW20061 ID AAW20061 standard; P XX AC AAW20061; XX DT 11-SEP-1997 (first XX DE Human macrophage der XX KW MDC; macrophage derl KW MDC; macrophage derl KW WDC; macrophage derl KW WDC; macrophage derl KW WOC; macrophage derl KW WOC; macrophage derl
GenCore version 5.1.6  Copyright (c) 1993 - 2003 Compugen Ltd.  OM protein - protein search, using sw model  Run on: July 28, 2003, 03:59:28 ; Search time 15.0756 Seconds  (without alignments)  609.878 Million cell updates/sec	Title: US-09-509-165A-31 Parfect score: 382 Sequence: 1 GPYGANMEDSVCCRDYVRYREICADPRVPYLKMILNKLSQ 69 Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5 Searched: 908470 seqs, 133250620 residues Total number of hits satisfying chosen parameters: 908470	Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	Database: A_Geneseq_101002:*  1: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*  2: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*  3: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*  4: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1983.DAT:*  5: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1983.DAT:*  7: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*  8: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*  9: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1988.DAT:*  9: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1988.DAT:*  10: /GIDS2/gcgdata/geneseq/geneseqp-embl/AA1988.DAT:*  10: /GIDS2/gcgdata/geneseq/geneseqp-embl/AA1988.DAT:*	11: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:* 11: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:* 12: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1991.DAT:* 13: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1991.DAT:* 14: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1992.DAT:* 15: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1994.DAT:* 16: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1995.DAT:* 17: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999.DAT:* 18: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999.DAT:* 20: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999.DAT:* 21: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999.DAT:* 22: /SIDS2/gcgdata/geneseqg-embl/AA2000.DAT:* 23: /SIDS2/gcgdata/geneseqg-embl/AA2001.DAT:* 23: /SIDS2/gcgdata/geneseqg-embl/AA2001.DAT:*

Human macrophage d Human macrophage d Macrophage darived A human monokine d Yeast pre-pro-alph Human MDC and huma Human MDC and huma Human MDC and huma Human MDC and cand Human MDC and sequenc Cytokine beta-13 s Human chemokine be Amino acid sequenc Stem cell mobilisi Human macrophage-d Macaque macrophage

AAY29904 AAY29900 AAW07604 AAW57881 AAB68352 AAW17668

Human macrophage d Macrophage derived Human macrophage-d Human macrophage d

AAY05880 AAW20062 AAY24416 AAY05875 AAW20059

Macrophage derived Human macrophage-d Chimeric chemokine

AAY24417 AAY05872 AAB61797 AAB61808 AAG78392

AAG68355 AAW59434

Murine MDC mature Mouse chemokine mM Murine chemokine m

Mouse macrophage d Rat macrophage der Peptide #6559 enco Human brain expres

Mouse chemokine pr

# ALIGNMENTS

	RESULT 1	AAW20061	ID AAW20061 standard; Protein; 69 AA.	XX	AC AAW20061;	xx	DT 11-SEP-1997 (first entry)	XX	DE Human macrophage derived chemokine analogue.	XX	KW MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;	KW rheumatoid arthritis; chemotaxis; fibroblast proliferation;	KW wound healing; anglogenesis; inflammation.	XX	OS Synthetic.		PN W09640923-A1.	XX	PD 19-DEC-1996.	XX	PF 07-JUN-1996; 96WO-US10114.		PR 16-NOV-1995; 95US-0558658.	PR 07-JUN-1995; 95US-0479620.	xx	PA (ICOS-) ICOS CORP.	XX	PI Godiska R, Gray PW;	XX	DR WPI; 1997-052324/05.	XX	Macrophage derived chemokine (MDC) and analogues - used	PT treatment of inflammatory diseases, MDC antibodies used to treat
10: /sips/lacaca/denesed/denesedp_empi/arisas.pai:	`	12: /SIDS2/gcgdata/geneseg/genesegp-embl/AA1991.DAT:*	`	14: /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1993.DAT:*	`	16: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1995.DAT:*	`	18: /SIDS2/gcgdata/geneseg/genesegp-embl/AA1997.DAT:*	19: /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1998.DAT:*	`	21: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2000.DAT:*	22: /SIDS2/gcgdata/geneseq/genesegp-emb1/AA2001.DAT:*	23: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*		Pred. No. is the number of results predicted by chance to have a	score greater than or equal to the score of the result being printed,	and is derived by analysis of the total score distribution.		SUMMARIES	de	lt Query	o. Score Match Length DB ID Description			100.0 69 20 AAY24415 ·	100.0 69 20 AAY05874	97.9 69 23	97.9 69 23	97.9 70 18	70 20	97.9 70 20	97.9 86 19 AAW59432	10 374 97.9 93 18 AAW20058 Macrophage derived

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                                                                                                                                                                                                                 KMILNKLSQ
                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ICOS-) ICOS CORP.
                                                                         69 AA;
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                                                                                                                                                                                                                                                                                                                                      02-AUG-1999
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26-SEP-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                          61
                                                                          Sequence
                                                                                                                                                                                                                                                                                                               AAY05874;
                                                                                                                                                                                                                                                                                                                                                                                                                                        vaccine.
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                                                                                                                                                                                                                                                                                                  Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
                                                                                                                                                                                                                                                                                       1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL
                                                                                                                                                                         atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chemokine (MDC)
                                           A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rhematoid arthritis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents a macrophage derived chemokine (Manalogue. MDC analogues are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate
                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                                                                                                                                                                                                                                     Length 69;
                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                   Query Match 100.0%; Score 382; DB 18; Best Local Similarity 100.0%; Pred. No. 9.7e-42; Matches 69; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Macrophage derived chemokine analogue MDC-\gammal.
Crohn's disease, rheumatoid arthritis, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 11; Column 59; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                          AAY24415 standard; peptide; 69 AA.
                        Claim 25; Page 84; 106pp; English.
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95US-0558658
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Synthetic.
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16-NOV-1995;
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                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                      61
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                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence represents synthetic analogue MDC yl of the novel human macrophage derived C-C chemokine MDC (see also AAY05871) MDC-yl consists of amino acid residues 1-69 of the MDC mature polypeptide, with residues 59-60 (Trp-Val) replaced with the sequence Tyr-Leu. The analogue is expected to be an artagonist of MDC activity, inhibiting activity by competitively binding to the receptor that recognises MDC or by forming inactive heterodimers with MDC. MDC antagonists are used in claimed methods for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antagonisť; chemoattractant; antiproliferative; dermatological; immunosuppressive; antiinflammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MDC analogue; macrophage derived chemokine; C-C chemokine; human;
inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive irresponses. Inflammatory disorders which may be treated in this vinclude Crohn's disease (manifested by chronic inflammation of bowel), atherosclerosis, arthritis and pulmonary fibrosis.
                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                           Length 69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human macrophage-derived C-C chemokine MDC analogue MDC-yl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Raport CJ;
                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                           Score 382; DB 20;
Pred. No. 9.7e-42;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          59..60 /note- "Trp-Val in native MDC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Godiska R, Gray PW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 11; Page 134; 147pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY05874 standard; Protein; 69 AA.
                                                                                                                                                                                                                                                                           100.0%; Sc
100.0%; Pr
tive 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98WO-US20270
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97US-0939107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                              69; Conservative
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WO200204499-A1.
                                                                                                                                     AA014155;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                   AA014155
                                                                                          RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to polymer-modified bioactive synthetic chemokines and to methods for their production and use. The compounds and methods of the backbone of the invention are useful in the analysis and treatment of various diseases states e.g. HIV and AIDS related disorders, asthma, allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ transplant rejection, and rheumatoid arthritis. This sequence represents the human chemokine MDC protein of the invention.
                                                                                                                                                                                                                                                                                                                                                   Human; chemokine; anti-HIV; antiasthmatic; antiarthritic; antizheumatic; antiarteriosclerotic; dermatological; antiinflammatory; antiallergic; immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV; AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis; atheroma; atherosclerosis; organ transplant rejection; MDC.
                                                                                                                                    1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
                                                                                                                                               1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLITFRDKEICADPRVPYL 60
                                                                                                               Gaps
aggregation in a mammal, for the treatment or palliation of lupus exythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in a mammal, and for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cressman
                                                                                       Length 69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 23; Length 69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polymer-modified bioactive synthetic chemokines useful
                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  treatment of various diseases or disorders e.g. asthma
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                                                                                       100.0%; Score 382; DB 20;
ilarity 100.0%; Pred. No. 9.7e-42;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 374; DB 23
Pred. No. 1e-40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bradburne JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Fig 10C; 176pp; English
                                                                                                                                                                                                                                                            AAO20022 standard; protein; 69 AA.
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97.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-JUL-2001; 2001WO-US21933.
                                                                                                                                                                                                                                                                                                                                Human chemokine MDC protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Botti P,
                                                                                                                                                                                                                                                                                                       11-JUN-2002. (first entry)
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                                                                                                                                                                                            KMILNKLSQ
                                                                                                   L Similarity
69; Conserv
                                                                                                                                                                                KMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kochendoerfer G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69 AA;
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                                             asthma
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                                                                   69
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                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
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                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                  AAO20022;
                                            treating
                                                                   Sequence
                                                                                       Query Match
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1 Similarity 97.1 67; Conservative

Best Local

Matches

1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; chemokine receptor modulator; chemokine; HIV infection; AIDS; asthma; allergic rhinitis; atopic dermatitis; atheroma; antinflammatory; antiasthmatic; antiallergic; dermatological; antiarteriosclerotic; antirheumatic; antistrhitic; anti-HIV; immunosuppressive; MDC; atherosclerosis; organ transplant rejection; rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Liberary receptor modulator useful for treating e.g. asthma, allergic rhinitis comprises a chemically modified carboxyl-terminus and/or amino terminus analogs
1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
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                                                                                                                                                                                                                                                                                            AA014155 standard; protein; 69 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hartley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-JUL-2001; 2001WO-US21934.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-JUL-2000; 2000US-217683P.
                                                                                                                                                                                                                                                                                                                                                                                                            25-APR-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Offord R, Gaertner H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 KMILNKLSQ 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-171703/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GRYP-) GRYPHON SCI
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                                                                                                                                           KMILNKLSQ
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                                                                                       KMILNKLSO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human MDC protein.
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AAW20060
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1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 GPYGANMEDSVCCRDYVRYRLDLRVVKHFYWTSDSCPRPGVVLLTFRDKELCADPRVPWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MDC analogue; macrophage derived chemokine; C-C chemokine; human; antagonist; chemotatractant; antiproliferative; dermatological; immunosuppressive; antinflammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).
                                                                                                                                                                                                                                                                                                                                                                                                             Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 374; DB 20;
Pred. No. 1.1e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Column 59; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY05873 standard; Protein; 70 AA.
                                                                                                                                                                                                                        95US-0660542.
95US-0479620.
95US-0558658.
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97.18;
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Best Local Similarity 97.19
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                                                                                                                                                                                                                                                                                                                                        Gray PW;
                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-443621/37.
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                                                             sapiens
                                                                                                                                                                                      07-JUN-1996;
                                                                                                                                                                                                                                            07-JUN-1995;
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                                                                                                                                                                                                                            07-JUN-1996;
                                                                                                               US5932703-A
                                                                                                                                                   03-AUG-1999
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                                                                                                                                                                                                                                                                                                                                        Godiska R,
                                                                              Synthetic
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                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GPYGANMEDSVCCRDYVRYRIPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases specially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine;
                                                                                                                        MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation; wound healing; angiogenesis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat Crohn's disease, rheumatoid arthritis, etc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 374; DB 18;
Pred. No. 1.1e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Macrophage derived chemokine analogue MDC (n+1).
                                                                                      Human macrophage derived chemokine analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 25; Page 83; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY24413 standard; peptide; 70 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97.18;
                                                                                                                                                                                                                                                                                                                 96WO-US10114
                                                                                                                                                                                                                                                                                                                                                   95us-0558658
                                                                                                                                                                                                                                                                                                                                                                   95US-0479620
                                                   11-SEP-1997 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 97.1 nes 67; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-052324/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70 AA;
                                                                                                                                                                                                                                                                                                                                                                                                         SODI (-SODI)
                                                                                                                                                                                                                                    WO9640923-A1
                                                                                                                                                                                                                                                                                                               07-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                   .6-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                   07-JUN-1995;
                                                                                                                                                                                                                                                                          19-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                          Godiska R,
                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY24413;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY24413
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Gaps

61

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97WO-US15315.

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09-SEP-1997;
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                                                                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                                                                                                      1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
                                                                                                                                                                                                                                                                                                                                                                                               GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
                                                                                                                                                             The present sequence represents synthetic analogue MDC(n+1) of the novel human macrophage derived C-C chemokine MDC (see also AAV05871). MDC(n+1) consists of a Leu residue following by amino acid residues 1-69 of the MDC mature polypeptide. The analogue is expected to be an antagonist of MDC activity, inhibiting activity by competitively binding to the receptor that recognises MDC or. by forming inactive heterodimers with MDC. MDC antagonists are used in claimed methods for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in a mammal, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chemokine; human; detection; forensic; diagnostic; treatment; cancer; degenerative condition; abnormal proliferation; regeneration;
                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                        Pertebrate Macrophage Derived Chemokines, analogues and antagonists
                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                             Score 374; DB 20; Length 70;
Pred. No. 1.1e-40;
2; Mismatches 0; Indels
                                                                                  Raport CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human chemokine protein 331D5 from CD1a+ cDNA library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "partial signal sequence"
16..86
/label= chemokine protein 331D5
                                                                                Gray PW,
                                                                                                                                            Example 11; Page 134; 147pp; English.
                                                                                Deeley MC, Godiska R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW59432 standard; Protein; 86 AA.
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/label= siqnal
                                                                                                                                                                                                                                                                                                                                              97.98;
97.18;
         98WO-US20270.
                             98US-0067447
97US-0939107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                  67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              degeneration; atrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                           KMILNKLSQ 70
                                                                                                                                                                                                                                                                                                                                                                                                                              61 KMILNKLSQ 69
                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                     WPI; 1999-254715/21.
                                                                                                                                                                                                                                                                                                     for treating asthma
                                                           (ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                         70 AA;
         28-SEP-1998;
                                       26-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                             28-APR-1998;
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                                                                                Chantry DH,
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Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL. 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLFRBKEICADPRVPWV 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's diséase; rheumatoid arthritis; chemotaxis; fibroblast proliferation; wound healing; angiogenesis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                            Mammalian CC and CXC chemokines – useful for treatment of, e.g. cancer and degenerative conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Macrophage derived chemokine for treating inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 374; DB 19;
Pred. No. 1.3e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25..93
/label= mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1..24
/label= sig_peptide
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                                                                                                 Zlotník A;
                                                                                                                                                                                                                                                                                                      Disclosure; Page 75; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW20058 standard; Protein; 93 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97.9%;
97.1%;
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95US-0479620.
96US-0025724.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the inventive compositions.
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                                                                                                   Hedrick JA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 KMILNKLSQ 69
                                                                                                                                                WPI; 1998-207387/18.
N-PSDB; AAV34996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
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07-JUN-1995;
10-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   409640923-A1
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                                                                                                   3orman DM,
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The present sequence represents human STCP-1. STCP-1 polypeptides demonstrate chemokine activity for T-cells. The polypeptides are useful prophylactically or therapeutically to treat HIV infection and other conditions associated with viral/bacterial pathogens infecting T-cells, macrophages or other immune system cells. They can be included (optionally chemically modified) with a pharmaceutically acceptable carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.) in therapeutic compositions for treating these conditions. STCP-1 also useful to assay for inhibitory compounds used to reduce circulatory system STCP-1 levels to allevate e.g. joint inflammation associated with rheumatoid arthritis, lupus or other autoimmune diseases. The polypeptides are also useful to prepare antibodies or hybridomas. The nucleic acids are useful to produce hybridisation probes to test for STCP-1 DNA/RNA in mammallan samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25 GPYGANMEDSVCCRDYVRYRLPLRIVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mammalian CC and CXC chemokines – useful for treatment of, e.g. cancer and degenerative conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chemokine; human; detection; forensic; diagnostic; treatment; degenerative condition; abnormal proliferation; regeneration; degeneration; atrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 97.9%; Score 374; DB 19; Length 93; Best Local Similarity 97.1%; Pred. No. 1.5e-40; Matches 67; Conservative 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note- "chemokine protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zlotník A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW59433 standard; Protein; 93 AA
                     Claim 1; Fig 2A-F; 96pp; English.
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/label- signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human chemokine protein 331D5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25..93
/label= 331D5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SCHE ) SCHERING CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 KMILNKLSQ 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-207387/18.
N-PSDB; AAV34997.
                                                                                                                                                                                                                                                                                                                                                                                   93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; STCP-1; chemokine activity; T-cells; treatment; HIV infection;
inhibitory compound; assay; reduce; circulatory system STCP-1 level;
joint inflammation; rheumatoid arthritis; lupus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL
                                                                                                                                                                                                                                              C(ys-cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotraxis towards a site of inflammation. MDC and it's analogues also induce fibrohast proliferation having a positive effect in wound healing and anglogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rhemmatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human STCP-1 polypeptides with chemokine activity - useful e.g. to treat HIV infection or other viral or bacterial pathogens infecting T-cells, macrophages or other immune system cells
                                                                                                  Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat Crohn's disease, rheumatoid arthritis, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                 A new macrophage derived chemokine, MDC, a member of the C-C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 374; DB 18;
Pred. No. 1.5e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Amino acid sequence of human STCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW62783 standard; Protein; 93 AA.
                                                                                                                                                                                       Claim 1; Page 73; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97.9%;
97.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97WO-US21552
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Best Local Similarity 97.11
Matches 67; Conservative
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Gray PW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chang M;
                                       WPI; 1997-052324/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85 KMILNKLSQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB; AAV38933.
                                                             N-PSDB; AAT76529
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-NOV-1997;
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  Godiska R,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
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AAW62783
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Homo sapiens
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                                                                                                                                                                                                                                                                                               AAY26175;
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                                                  Seguence
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Peptide
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                                              Nucleic acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be used in diagnostics. The chemokines themselves are useful for treatment of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by the inventive
                                                                                                                                                                                                                  1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
                                                                                                                                                                                                                              Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy; arthritis; inflammatory disorder; cancer; Crohn's disease;
                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antibodies specific for macrophage-derived chemokine - useful for purifying or detecting the chemokine or modulating its activity
                                  This sequence represents a novel human chemokine protein, 331D5
                                                                                                                                                                                           .;
0
                                                                                                                                                               Length 93;
                                                                                                                                                                                          0; Indels
                                                                                                                                                              Score 374; DB 19;
Pred. No. 1.5e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; Column 21-24; 22pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                            AAW40811 standard; Protein; 93 AA.
         Claim 1; Page 78; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "leader
                                                                                                                                                           97.98;
97.18;
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25..93
/note=
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                                                                                                                                                                                                                                                                                  KMILNKLSQ
                                                                                                                                                                                                                                                                   61 KMILNKLSO
                                                                                                                                                                              Similarity
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                                                                                                                                       93 AA;
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                                                                                                            compositions
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                       Sequence
                                                                                                                                                                Query Match
                                                                                                                                                                              Local
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                                                                                                                                                                                                                                                                                                                                    RESULT 13
AAW40811
                                                                                                                                                                                       Matches
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isolating non-human MDC homologues. The MDC protein is potentially useful. for treating inflammatory disorders, cancer, etc. Antagonists of MDC can be used for treating Crohn's disease, arthritis, atherosclerosis etc.
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                                                                                                                                                                                                                                                                                                                   1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    humoral response; cell-mediated response; PCR; immune response; antigen; expression plasmid vector.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "mature macrophage-derived chemokine"
                                                                                                                                                                           Length 93;
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                                                                                                                                                                        Score 374; DB 19;
Pred. No. 1.5e-40;
2; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note- "signal peptide"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Garzino-Demo
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                                                                                                                                                                        97.98;
97.18;
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                                                                                                                                                                  Query Match
Best Local Similarity 97.1;
Matches 67; Conservative
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/note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-385578/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                      KMILNKLSQ
                                                                                                                   93 AA;
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                                                                                        25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
                                                                                                                                                                                                                                                                                                                   Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
                                                                           1 GPYGANMEDSVCCRDYVRYRIPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL
                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
                          Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 93;
                                                   Indels
                         Score 374; DB 20;
Pred. No. 1.5e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 374; DB 20;
Pred. No. 1.5e-40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2; Column 41-43; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                            Human macrophage derived chemokine.
                                                                                                                                                                                                                  AAY24414 standard; Protein; 93 AA
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/label= signal
25..93
/label= MDC
                      97.9%;
milarity 97.1%;
Conservative 2
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95US-0479620.
95US-0558658.
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97.1%;
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                                                                                                                                          WPI; 1999-443621/37.
N-PSDB; AAX90162.
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                  Query Match
Best Local Similarity
Matches 67; Conserv
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Best Local Similarity
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 93 AA;
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07-JUN-1995;
16-NOV-1995;
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                                                                                                                                                                                                                                          AAY24414;
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Sequence 7 Sequence 1 Sequence 1

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Sequence Sequence 5

Scoring table:

Searched:

Database

Perfect score:

Run on:

Sequence:

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

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Sequence 31, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerstein, Murray &
South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                   US-08-836-922-4
US-08-836-922-4
US-08-716-188-7
US-08-936-387-13
US-08-450-905B-18
US-08-387-40
US-08-347-492B-12
US-08-347-492B-12
US-08-633-682-3
                                                                                                                                                                                 JS-08-421-144A-8
                                                                                                                                                                                                           US-08-798-143-12
                                                                                                                                                                                                                        US-08-467-123B-5
                        US-08-836-922-2
US-08-836-922-3
                                                                                                                                                                                                                                                              ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Marshall, O'Toole, Gers
STREET: 6300 Sears Tower, 233 Sout
CITY: Chicago
STATE: Illinois
CUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 00-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69 amino acids
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 33 CORRESPONDENCE ADDRESS:
 800000777777777777
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US-08-660-542-31
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350.133 Million cell updates/sec
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Sequence 6
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Sequence 2
Sequence 4
Sequence 6
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                                                                                        July 28, 2003, 03:59:58; Search time 5.79832 Seconds
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                                                                                                                                                         382
1 GPYGANMEDSVCCRDYVRYR......EICADPRVPYLKMILNKLSQ
                                                                                                                                                                                                                                                                                                                                                                                             /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
            GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-232-878-6

US-08-479-603-2

US-08-660-542-32

US-08-660-542-32

US-09-230-637-26

US-09-230-637-26

US-09-334-951-65

US-09-334-951-65

US-09-334-951-65

US-09-334-951-65

US-09-318-318-6

US-09-230-3718-6

US-09-230-3718-6

US-09-318-318-6

US-09-336-387-178-21

US-09-318-338-178-21

US-09-318-338-178-21
                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                     262574 seqs, 29422922 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                              OM protein - protein search, using sw model
                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                   Issued_Patents_AA:*
                                                                                                                                           US-09-509-165A-31
                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Match Length
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Score

Result . 9 Length 69;

DB 2;

100.0%; Score 382;

single

STRANDEDNESS:

MOLECULE TYPE: peptide

US-08-660-542-31

Query Match

Sequence

Sequence Sequence

-08-615-232A-11 US-08-836-922-1

129 127.5 127.5 123 121 121 121 121 121 119 119

linear

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RESULT 3
US-08-480-449-2
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                                                         1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
                                                                               1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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                       Gaps
                                                                                                                                                                                                                                                                                                                          APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 374; DB 2; Length 70;
Pred. No. 6.2e-42;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISH PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
   Pred. No. 5.4e-43; ; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27866/33318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                  Sequence 30, Application US/08660542 Patent No. 5932703 GENERAL INFORMATION:
Best Local Similarity 100.0%; P
Matches 69; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 38,153
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97.1%;
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LENGTH: 70 amino acids
TYPE: amino acid
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Best Local Similarity 97.1<sup>s</sup>
Matches 67; Conservative
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gass, David A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide
                                                                                                                                  61 KMILNKLSQ 69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chicago
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US-08-660-542-30
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25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
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Patent No. 5932703
GENERAL INFORMATION:
GENERAL INFORMATION:
GOGISKA, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 93;
                                                                        APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MARNOPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREPT: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago STATE: 111inois STATE: 111inois COUNTRY: United States of America . 2.Pp. 60606-6402. COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,449
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 97.9%; Score 374; DB 1; I
Best Local Similarity 97.1%; Pred. No. 8.7e-42;
Matches 67; Conservative 2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 27866/32779
TELECOMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                            STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                             ZIP: 60606-6402
COMPUTER REALABLE FORM:
MEDIUM TYPE: Floppy disk
CMDUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
; Sequence 2, Application US/08480449
; Patent No. 5688927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: GBSS, David A
REGISTRATION NUMBER: 38,153
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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                                                      GENERAL INFORMATION:
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STREET: bov.
-mv: Chicago
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Matches
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APPLICANT: Campbell, James
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Wou, Lijan
TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
FILE REFERENCE: SWI-110PRV
CURRENT APPLICATION NUMBER: US/09/232,878
CURRENT FILING DATE: 1999-01-15
NUMBER OF SEX ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97.9%; Score 374; DB 4; Length 93; 97.1%; Pred. No. 8.7e-42; Live 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                          SULTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 374; DB 2;
Pred. No. 8.7e-42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Mismatches
                                                                                                                                                                                                                     APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY,FAGENT INFORMATION:
NAME: Gass, David A
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEFRON: 312/474-6300
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 6, Application US/09232878 Patent No. 6245332 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97.9%;
ilarity 97.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                CLASSIFICATION: 514
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67; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
CORGANISM: H. sapiens
US-09-232-878-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
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Best Local
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Matches 6
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Matches
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1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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                                                                                                                                                                                                ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                  APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCT-US95-07294-2
Sequence 2, Application PC/TUS9507294
Sequence 2, Application PC/TUS9507294
GENERAL INFORMATION:
TITLE OF INVENTION: Human Chemokine Beta-13
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 374; DB 4;
Pred. No. 8.7e-42;
2; Mismatches 0
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FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
ATTORNEY Gass, David A.
ATTORNEY 38,153
                                                                                                                                                                                                                       STREET: 6300 Sears Tower, 233 Sout CITY: Chicago STATE: 1111nois COUNTRY: United States of America ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/479,603
US-08-479-603-2; Sequence 2, Application US/08479603; Patent No. 632003; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 2:
TELECOMMUNICATION INFORMATION
TELEPANE: 312/474-6300
TELEPAN: 312/474-0448
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97.1%;
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-479-603-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 6 BECKER FICTLY: ROSELAND STATE: NEW JERSEY COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 KMILNKLSQ 69
                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC
OPERATING SYSTEM:
SOFTWARE: PatentI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
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Best Local Similarity
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1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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APPLICANT: Godiska, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CARRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago STATE: 1111nois COUWTRY: United States of America ZIP: 6060-6402 ZIP: 6060-6402 America ZIP: RADABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                Length 69;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                                                                                                                                                                                                                                                                                                                                                                                           Score 350; DB 2; L
Pred. No. 8.5e-39;
5; Mismatches 1;
                                    38,153
150. 27866/33318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08/479,620
                               REGISTRATION NUMBER: 38 153
REGISTRATION NUMBER: 2786
TELECOMMUICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 25-3856
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38,153
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match
Best Local Similarity 91.3%;
Matches 63; Conservative
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/4',
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Gass, David'A. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                        TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide US-08-660-542-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 KMILNKLSQ 69
                                                                                                                                                                                                                                                                                                         linear
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US-08-660-542-25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 32, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ocore 374; DB 5; Length 93;
Pred. No. 8.7e-42;
2; Mismatches 0; Trani-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Chicago
STATE: 11linois
COUNTRY: United States of America
COUNTRY: United States of America
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: BATENIN PC-DOS_MS-DOS
SOFTWARE: PATENIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
                   MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07294
FILING DATE: June 6, 1995
                                                                                                                                                                                CLASSIFICATION:
PRIOR APPLICATION:
PRIOR APPLICATION:
APPLICATION NUMBER: 08/464,594
FILING DATE: June 5, 1995
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 35.800-3
FELECOMMUNICATION INFORMATION:
TELEPHONE 201-994-1700
TELEPHONE 201-994-1700
INFORMATION FOR SEC ID NO: 2:
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APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 97.9%;
Best Local Similarity 97.1%;
Matches 67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 93 AMINO ACIDS
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: PROTEIN
  COMPUTER READABLE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 514
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
TOPOLOGY: LINEAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
US-08-660-542-32
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12 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKL 67
                                        APPLICANT: Reliz, Marvin
TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
TITLE OF INVENTION: No. 6264958el Genes of Kaposi's Sarcoma
TITLE OF INVENTION: Associated Herpesvirus
FILE REPRENCE: 1107.78372
CURRENT APPLICATION NUMBER: US/09/230,637
CURRENT APPLICATION NUMBER: 06/022,591
PRIOR FILING DATE: 1996-07-25
PRIOR FILING DATE: 1996-07-25
PRIOR FILING DATE: 1996-07-25
NUMBER OF SEQ ID NOS: 62
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT:
II, ET AL.
TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS: ADDRESSEE: CARELA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART & OLSTEIN STRET: ADDRESSEE: CECCHI, STEWART & CORRESPENCE OF STREAT: ADDRESSEE: CARELA, BYRNE, BAIN, GILFILLAN, STEWET: OSELAND STREAT: NOSELAND STATE: NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 36.9%; Score 141; DB 4; Length 95; Best Local Similarity 39.3%; Pred. No. 3e-11; Matches 22; Conservative 19; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Kaposi's sarcoma-associated herpes-like virus US-09-230-637-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/208,339A
FILING DATE: 8 MARCH 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4, Application US/08208339A Patent No. 5504003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 INCH DISKETTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36,134
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WORD PERFECT 5.1
                            Hardwick, J. Marie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
     Nicholas, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER:
FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PS/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
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TOPOLOGY: LI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: US ZIP: 07068
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                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 26
LENGTH: 95
  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
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                                                                                                                                                                                                                                         /note="The amino acid at position 24 is selected from the group consisting of arginine, glycine, alanine, valine, leuchne, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methlonine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="The amino acid at position 30 is independently selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note-"The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamane, and cysteine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
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Pred. No. 1e-37;
0; Mismatches 6; Indels
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Patent No. 6264958
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ch 89.8%;
1 Similarity 91.3%;
63; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
OTHER INFORMATION:
OTHER INFORMATION: /not
                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature OTHER INFORMATION:
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                 STRANDEDNESS: single
TOPOLOGY: linear
                                                                  MOLECULE TYPE: peptide
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OTHER INFORMATION:
OTHER INFORMATION:
FEATURE:
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OTHER INFORMATION:
                                                                                                                     .NAME/KEY: Protein LOCATION: 1..69
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INFORMATION:
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OTHER INFORMATION:
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amino acid
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Best Local Similarity
Matches 63; Conserv
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Gaps

us-09-509-165a-31.rai

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4 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMI 63
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                                                                                                          24 GTHKE--LCCLVYTSWQIPQKEIVDYSETSPQCPKPGVILLTRKGRQICADPHKKWVQKY 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Myeloid progenitor Inhibitory Factor-1 (MDIF-1)
TITLE OF INVENTION: Polynucleotides and Polypeptides (As Amended)
FILE REFERENCE: 1488.033000B
CURRENT APPLICATION NUMBER: US/09/334,951
CURRENT FILING DATE: 1999-06-17
EARLIER APPLICATION NUMBER: US 08/208,339
EARLIER FILING DATE: 1994-03-08
EARLIER FILING DATE: 1994-05-05
EARLIER FILING DATE: 1994-05-05
EARLIER PILING DATE: 1995-05-05
EARLIER FILING DATE: US 08/446,881
EARLIER APPLICATION NUMBER: US 08/465,682
                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1) IITLE OF INVENTION: Polynucleotides and Polypeptides (As Amended)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 70;
34.8%; Score 133; DB 3; Length 89; 37.5%; Pred. No. 3.1e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 131; DB 4; Length /v
Pred. No. 4.2e-10;
' wiematches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34.3%; Scc...
37.5%; Pred. No. 4....
16; Mismatches
                                             16; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: 1488 03300B

CURRENT APPLICATION NUMBER: US/09/334,951

CURRENT APPLICATION NUMBER: US/09/334,951

CURRENT APPLICATION NUMBER: US/08/208,339

EARLIER APPLICATION NUMBER: US/08/46,881

EARLIER APPLICATION NUMBER: US/08/46,881

EARLIER APPLICATION NUMBER: US/08/46,682

EARLIER APPLICATION NUMBER: US/08/46,682

EARLIER PILING DATE: 1995-06-06

EARLIER PILING DATE: 1995-09-30

NUMBER OF SOO ID NOS: 65
                                                                                                                                                                                                                                                                                                                               Sequence 65, Application US/09334951
Patent No. 6451562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/09334951
Patent No. 6451562
GENERAL INFORMATION:
APPLICANT: Ruben, Stewen M.
APPLICANT: Li, Haodong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 34.3%
Best Local Similarity 37.5%
Matches 24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Ver. 2.0
                                             24; Conservative
                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
APPLICANT: Li, Haodong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-09-334-951-65
                           Similarity
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63 ISDL 66
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82 ISDL 85
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    Query Match
Best Local S
Matches 24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4) 64
                                                                                          4 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMI 63
                                                                                                                 24 GTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTTKRGRQICADPNKKWVQKY 81
                                                    Gaps
                                                    5
      Length 89;
                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.: 1100 NEW YORK AVENUE, N.W., SUITE 600 WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Score 133; DB 1;
; Pred. No. 3.1e-10;
16; Mismatches 22
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REFERENCE/DOCKET NUMBER: 1488.0330007
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRILING DATE: 08-MAR-1994
PRIOR PAPLICATION NUMBER: US 08/208,339
PRIOR APPLICATION DATE:
APPLICATION NUMBER: US 08/446,881
FILING DATE: 05-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/465,682
FILING DATE: 06-UN-1995
PRIOR APPLICATION NUMBER: US 08/468,775
FILING DATE: 06-UN-1995
FILING DATE: 06-UN-1995
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,209
FILING DATE: 22-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/08722719
Patent No. 6001606
                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: ROSEN, CRAIG A.
APPLICANT: RUBIN, STEVEN M.
APPLICANT: LI, HAODONG
APPLICANT: LI, HAODONG
TITLE OF INVENTION: THERAPEUT
TITLE OF INVENTION: THEATING
TITLE OF INVENTION: FACTOR-1
TITLE OF INVENTION: (M-CIF),
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (202) 371-2500
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
      34.8%;
37.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89 amino acids
                                                 24; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
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3Y: linear
                             Similarity
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US-08-722-719-6
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    Query Match
Best Local S.
Matches 24,
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Search completed: July 28, 2003, 04:05:37 Job time : 6.79832 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                    24 GTNKE--LCCLVYISWQIPQKFIVDYSETSPQCPKPGVMLLTKRGRQICADPNKKWVQKY 81
                                                                                                                                                                                                                                                                                                                                                     Gaps
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APPLICANT: Coleman, Roger
APPLICANT: Wilde, Craid G.

APPLICANT: Seilhamer, Jeffrey J.

TITLE OF INVENTION: A NEW CHEMOKINE EXPRESSED IN FETAL SPLEEN,
TITLE OF INVENTION: ITS PRODUCTION AND USES
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3330 HILLVIEW AVENUE
                                                                                                                                                                                                                                                                                                                                                22; Indels
                                                                                                                                                                                                                                                                                               Query Match 34.3%; Score 131; DB 4; Length 89; Best Local Similarity 37.5%; Pred. No. 5.6e-10; Matches 24; Conservative 16; Mismatches 22; Indels
: EARLIER FILING DATE: 1995-06-06
: EARLIER APPLICATION NUMBER: US 08/468,775
: EARLIER FILING DATE: 1995-06-06
: EARLIER PELION NUMBER: US 08/722,719
: EARLIER PELION NUMBER: US 08/722,719
: EARLIER FILING DATE: 1996-09-30
: NUMBER OF SEQ ID NOS: 65
: SEQ ID NO 6
: LENGTH: 89
: TYPE: PRT
: TYPE: PRT
: US-09-334-951-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: LUTHER, BARBARA J.
REGISTRATION NUMBER: 33,954
REFERENCE/DOCKET UNMBER: PF-0026 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 855-0555
TELEFAX: (415) 855-0572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/375,346A FILING DATE: 19-JAN-1995 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 6, Application US/08375346A
Patent No. 5605817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
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82 ISDL 85
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US-08-375-346A-6
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22 GTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKKGRQICADPNKKWVQ 77
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                                                                                                                                                                    5
                                                                                                             Length 78;
                                                                                                          Query Match 33.8%; Score 129; DB 1; Best Local Similarity 39.7%; Pred. No. 8.8e-10; Matches 23; Conservative 14; Mismatches 19;
  internal
; FRAGMENT TYPE: ;
; ORIGINAL SOURCE:
US-08-375-346A-6
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Sequence Sequence

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(without alignments)
869.687 Million cell updates/sec
                                        July 28, 2003, 04:04:49 ; Search time 9.42227 Seconds
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1 GPYGANMEDSVCCRDYVRYR......EICADPRVPYLKMILNKLSQ
     GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                            451899 segs, 118759770 residues
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 2000000000
                                                                 US-09-509-165A-31
                                                                 Title:
Perfect score:
                                                                                          Scoring table:
                                                                                                            Searched:
                                                                               Sequence:
                                                                                                                                                                               Database
                                         Run on:
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Sequence 34, Appl Sequence 11, Appl Sequence 11, Appl Sequence 10, Appl Sequence 10, Appl Sequence 20, Appl Sequence 21, Appl Sequence 21, Appl Sequence 29, Appl Sequence 21, Appl Sequence 21, Appl Sequence 23, Appl Sequence 24, Appl Sequence 24, Appl Sequence 24, Appl Sequence 37, Appl Sequence 37, Appl Sequence 24, Appl Sequence 37, Appl

US-09-334-954A-65
US-09-834-954A-65
US-09-834-794A-34
US-09-834-794A-34
US-09-834-794A-34
US-09-834-794A-34
US-09-144-838-5
US-09-144-838-10
US-09-144-838-10
US-09-195-457-11
US-09-792-793A-29
US-09-792-793A-8
US-09-792-793A-8
US-09-792-793A-8
US-09-792-793A-8
US-09-793A-8

# /cgn2\_6/ptodata/2/pubpaa/US10\_NEW\_PUB.pep:\* /cgn2\_6/ptodata/2/pubpaa/US10\_PUBCOMB.pep:\* /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep:\* /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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	Description	Sequence 6, Appli	Sequence 2, Appli	2,	Sequence 2, Appli	2, 7	3,	437	Sequence 7, Appli	Sequence 3, Appli	9	Sequence 28, Appl	6, A	Sequence 6, Appli	Sequence 792, App	Sequence 6, Appli	65
SOMMAKIES	ΩĮ	US-09-837-446-6	US-09-811-088-2	US-10-314-410-2	US-09-908-599-2	US-09-908-600-2	US-10-001-221A-3	US-09-864-761-43730	US-10-001-221A-7	US-09-144-838-3	US-10-001-221A-6	US-09-792-793A-28	US-09-334-923A-6	US-09-334-954A-6	US-09-925-302-792	US-09-144-838-6	US-09-334-923A-65
		10	11	15	10	10	15	10	15	10	15	11	10	10	10	10	10
	% Query Match Length DB	93	93	93	93	93	68	37	67	71	78	69	88	68	46	73	70
	& Query Match	97.9	97.9	97.9	9.96	9.96	67.0	55.8	53.0	36.9	36.6	34.8	34.8	34.8	34.8	34.6	34.3
	Score	374	374	374	369	369	256	213	202.5	141	140	133	133	133	133	132	131
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KMILNKLSQ 61 KMILNKLSQ

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RESULT 2 US-09-811-088-2

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	0; Gaps	PRVPYL     :: PRVPWV
	0;	ICAD ICAD ICAD
ULT 1  09-837-446-6  equence 6, Application US/09837446  atent No. US20202013341A1  atent No. US20202013341A1  APPLICANT: Butcher, Eugene C. APPLICANT: Campbell, James J. APPLICANT: Rottman, James B. APPLICANT: Rottman, James B. APPLICANT: Wu, Lifan TITLE OF INVENTION: Trafficking TITLE OF INVENTION: Trafficking FILE REFERENCE: STAN-110CON CURRENT APPLICATION NUMBER: US/09/637,446  CURRENT FILING DATE: 1999-01-15  NUMBER OF SEQ ID NOS: 6  ENOW FILING DATE: 1999-01-15  NUMBER OF SEQ ID NOS: 6  LENGTH: 93  TYPE: PRT  ORCANISM: H. sapiens  09-837-446-6	Length 93; Indels	1 GPYGANMEDSVCCRDYVRYRLELRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
mory'	10; -39; . 0;	SCPRP 
nic Me 46	Score 374; DB 10; Pred. No. 1.4e-39; 2; Mismatches · 0;	FYWTSD 
yster 37,44 8 · on 4	e 37. No ismat	VVKH)
of Syng 0 Syng 709/8: 11,7 32,874	Score Pred 2; M	RLPLR       RLPLR
SULT 1  Sequence 6, Application US/09837446  Sequence 6, Application US/09837446  Sequence 6, Application US/09837446  Sequence 6, Application US/09837446  Settle No. US. OLOGOOL SALAI  APPLICANT: Campbel, James J.  APPLICANT: Campbel, James J.  APPLICANT: Wo tinan, James B.  APPLICANT: W. Lijan  TITLE OF INVENTION: Trafficking  FILE REFERENCE: STAN-110CON  CURRENT APPLICATION NUMBER: US/09/0837,446  CURRENT APPLICATION NUMBER: US/09/0837,446  CURRENT FILING DATE: 1999-01-15  NUMBER OF SEQ ID NOS: 6  LENOTH: 93  TYPE: PRT  ORGANISM: H. Sapiens  1:09-837-446-6		DYVRY        DYVRY
n US 41A1 Ugen Ugen Jame Jame Jame Joodul 110C UMBE 200 99-0	97 97 ativ	VCCR VCCR
SULT 1  -09-837-446-6  Sequence 6, Application US/0983  Patent No. US20020019341A1  APPLICANT Butcher, Eugene C. APPLICANT: Bottman, James J. APPLICANT: Rottman, James J. APPLICANT: Rottman, James B. APPLICANT: Wu, Lijan  TITLE OF INVENTION: Modulation  TITLE OF INVENTION: Modulation  TITLE OF INVENTION: Modulation  TITLE OF INVENTION: Modulation  TITLE OF INVENTION: MODULE: USCOURENT APPLICATION NUMBER: USCOURRENT APPLICATION NUMBER: USCOURENT FILING DATE: 1999-01-15  RINGRE OF SEQ ID NOS: 6  SOFTWARE: FASLSEQ for Windows  LENGTH: 93  TYPE: PRT  ORGANISM: H. Sapiens	Query Match 97.9%; Best Local Similarity 97.1%; Matches 67; Conservative	NWEDS 
S Appli S S S S S S S S S S S S S S S S S S S	imila ; Cc	SPYGP 
SULT 1 Sequence 6, Applicat Patent No. US202020 Berent No. US202020 Berent No. US202020 APPLICANT: Butcher, APPLICANT: Campbel APPLICANT: Campbel APPLICANT: Wu, LL1 APPLICANTION FILE OF INVENTION: FILE OF INVENTION CURRENT APPLICATION CURRENT FILING DATE: PRIOR FILING DATE: PRIOR FILING DATE: SOFTWARE: FastSEQ i SEQ ID NO 6 LENGTH: 93 LENGTH: 93 LENGTH: 93 TYPE: PRT ORGANISM: H. Sapie	tch al S	1 (25 (
SULT 1 Sequence 6, Sequence 6, Bereart No. U GREEAL INFO. U APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: TITLE OF IN TITLE OF IN FILE REFREE CURRENT APP CURRENT APP CURRENT APP CURRENT APP CURRENT FILE PRIOR FILIN PRIOR FILIN PRIOR FILIN FILI	Query Ma Best Loc Matches	
RESULT 1 US-09-837-446-6 Sequence 6, A Sequent No. US. GENERAL INFORM APPLICANT: APPLICANT: TITLE OF INV. FILE REFEREN CURRENT APPL. CURRENT A	Que Best Matc	Oy Db
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1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 369; DB 10; Length 93;
Pred. No. 5.8e-39;
3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                              Score 374; DB 15; Length 93;
Pred. No. 1.4e-39;
2; Mismatches 0; Indels
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Sequence 2, Application US/09908600
Patent No. US20020098545A1
GENERAL INFORMATION:
APPLICANT: LI, HAODONG
SEIBUL, GEORGE
TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: HUMAN GENOME SCIENCES, INC. STREET: 9410 KEY WEST AVENUE CITY: ROCKVILLE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: L1, Haodong et al.
TITLE OF INVENTION: Human Chemokine Beta 13
FILE REFERENCE: PF17P3
CURRENT APPLICATION NUMBER: US/09/908,599
CURRENT FILING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: 09/432,768
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1999-11-05
NUMBER OF SEQ ID NOS: 22
SOFTWARE: PATENTIN Ver: 2.0
SEQ ID NO 2
PRIOR APPLICATION NUMBER: US 09/354,809
PRIOR FILING DATE: 1999-07-16
PRIOR PILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 93
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; Sequence 2, Application US/09908599
; Patent No. US20020055147Al
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                    97.9%;
97.1%;
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Best Local Similarity 95.7%;
Matches 66; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 97.9 Best Local Similarity 97.1 Matches 67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 KMILNKLSQ 69
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US-09-908-599-2
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                                                                                                                                                                                                                                                                            TYPE: PRT
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                                                                                                                                      APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
APPLICANT: Pan, Yano, Yano
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES
FILE REFERENCE: 0734-324001
CURRENT FILING DATE: 2001-03-16
CURRENT FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: US 09/712,726
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1997-04-16
PRIOR FILING DATE: 1999-07-16
PRIOR FILING DATE: 1997-04-16
PRIOR FILI
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APPLICANT: Holtzman, Douglas A.
APPLICANT: Holtzman, Douglas A.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES.
TITLE OF INVENTION: USES.
TITLE OF INVENTION: USES.
CURRENT APPLICATION NUMBER: US/10/314,410
CURRENT FILING DATE: 2001-12-06
PRIOR APPLICATION NUMBER: US 09/712,726
PRIOR APPLICATION NUMBER: US 09/712,726
PRIOR FILING DATE: 2000-11-14
PRIOR APPLICATION NUMBER: US 09/712,742
PRIOR PPLICATION NUMBER: US 09/77,421
PRIOR FILING DATE: 2001-01-10
PRIOR FILING DATE: 2001-01-10
PRIOR FILING DATE: 2001-01-10
PRIOR FILING DATE: 2001-01-10
PRIOR PRIOR APPLICATION NUMBER: US 09/757,421
PRIOR APPLICATION NUMBER: US 08/843,652
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97.1%; Pred. No. 1.4e-39;
Live 2; Mismatches 0;
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APPLICATION NUMBER: US 08/843,651
FILING DATE: 1997-04-16
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   Sequence 2, Application US/09811088 Patent No. US20020160446A1
                                                     GENERAL INFORMATION:
APPLICANT: Holtzman, Douglas A.
APPLICANT: Gearing, David P.
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Matches 67; Conservative
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; ORGANISM: Homo sapiens
US-09-811-088-2
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us-09-509-165a-31.rapb

61 KMILNKLS 68 | :|:||| 61 KKLLHKLS 68

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Sequence 3, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Schall, Thomas J. Premack, Brett Howard, Maureen
TITLE OF INVENTION: WETHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/J4
CURRENT FILING DATE: 2001-10-30
PRIOR FILING DATE: 2001-04-20
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION: CUNKNOWN>
PRIOR APPLICATION NUMBER: 09/484,221
FILING DATE: CUNKNOWN>
APPLICATION NUMBER: 09/484,221
FILING DATE: CUNKNOWN>
APPLICATION NUMBER: 09/484,221
FILING DATE: CUNKNOWN>
ATTORNEY/ABENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 33733
REGISTRATION NUMBER: 3773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96.6%; Score 369; DB 10; Length 93; 95.7%; Pred. No. 5.8e-39; ive 3; Mismatches 0; Indels
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61.8%; Pred. No. 6.5e-25;
tive 17; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: PF177PP TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2
                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 93 amino acids
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SOFTWARE: PatentIn version 3.1
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Matches 66; Conservative
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; ORGANISM: Homo sapiens
US-10-001-221A-3
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Best Local Similarity
Matches 42; Conserva
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GREEAL HOUSENITY: CHEAN GENERAL STATES GENERAL HOUSENITY FRANCE APPLICANT: PREAD, MAINTENED STATES GENERAL SAPPLICANT: CHEAN WEARLANT GENERAL MAINTENED STATES BY MICROARRAY TITLE OF INVERTION: GENE EXPRESSION ANALYSIS BY MICROARRAY TITLE OF INVERTION: GENE EXPRESSION ANALYSIS BY MICROARRAY FILE REFERENCE: AGONIGO-23 (1979/864,761)
CURRENT FELING DATE: 2000-05-28 (2001-05-23)
FRIOR PELLING DATE: 2000-05-26 (2001-05-23)
FRIOR PELLING DATE: 2000-05-26 (2001-05-24)
FRIOR PELLING DATE: 2000-05-26 (2001-05-24)
FRIOR PELLING DATE: 2000-05-26 (2001-05-24)
FRIOR PELLING DATE: 2000-05-27 (2001-05-24)
FRIOR PELLING DATE: 2000-05-27 (2001-06-24)
FRIOR PELLING DATE: 2000-05-36 (2001-30-24)
FRIOR PELLING DATE: 2000-05-30 (2001-20-24)
FRIOR PELLING DATE: 2000-05-30 (2001-20-24)
FRIOR PELLING DATE: 2000-05-30 (2001-20-
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N: EXPRESSED IN LUNG, SIGNAL = 0.79
N: EXPRESSED IN FETAL LIVER, SIGNAL = 0.73
N: EXPRESSED IN BRAIN, SIGNAL = 0.66
N: EXPRESSED IN BONE MARROW, SIGNAL = 0.7
N: EXPRESSED IN ADULT LIVER, SIGNAL = 0.7
N: EXPRESSED IN MOUT LIVER, SIGNAL = 0.7
N: EXPLUMAN HIT: W61220.1, EVALUE 8.50e-01
N: SWISSPROT HIT: 000626, EVALUE 3.00e-18
Sequence 43730, Application US/09864761 Patent No. US20020048763A1 GENERAL INFORMATION:
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OTHER INFORMATION: EXPRESSED IN PLACE
OTHER INFORMATION: EXPRESSED IN FETAL
OTHER INFORMATION: EXPRESSED IN BRAIN
OTHER INFORMATION: EXPRESSED IN BRAIN
OTHER INFORMATION: EXPRESSED IN BONE
OTHER INFORMATION: EXPRESSED IN ADULT
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ORGANISM: Homo sapiens
FEATURE:
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US-09-792-793A-28
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US-10-001-221A-6
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Sequence 7. Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Schall, Thomas J. Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REFERENCE: 10709/A4
CURRENT FILING DATE: 2001-10-30
PRIOR PILING DATE: 2001-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Simon, Michael A.
APPLICANT: Simon, Reyna
APPLICANT: Simon, Reyna
APPLICANT: Simon, Reyna
APPLICANT: Simon, Repna
APPLICANT: Simon, Repna
APPLICANT: Kent, Stephen B.H.
TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
FILE REFERENCE: GREN-020/01US
CURRENT APPLICATION NUMBER: US/09/144,838A
CURRENT APPLICATION NUMBER: US 60/057,620
EARLIER APPLICATION NUMBER: US 60/057,620
EARLIER PILING DATE: 1997-09-04
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3:
LENTH: 71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 DSVSIPITCCQDYIRHPLPSRLYKEFFWTSKSCRKPGVVLITVKNRDICADPRQVWVKKL 62
                                                                  Gaps
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                  Length 37;
                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 53.0%; Score 202.5; DB 15; Best Local Similarity 55.4%; Pred. No. 3.3e-18; Matches 36; Conservative 15; Mismatches 9; 1
                                                                                                                                1 ANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGV 37
                                                                                                            5 ANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGV 41
                    Score 213; DB 10;
Pred. No. 8.4e-20;
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      55.8%; scor.
100.0%; Pred. No. co...
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 7
LENGTH: 67
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Query Match
Best Local Similarity 100..
-hos 37; Conservative
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LHKLS 67
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Gaps

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Indels

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GENERAL INFORMATION:
APPLICANT: MCDORALION:
APPLICANT: COGGINS, Philip
TITLE OF INVENTION: OTHER INFLAMMATORY CONDITIONS AND DISORDERS
FILE REFERENCE: 25020-601D
CURRENT APPLICATION NUMBER: US/09/792,793A
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 93
                                                                                                                                                                 Sequence 6, Application US/10001221A
Sequence 6. Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
TAPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Schall, Thomas J. Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
FILE REPERBNCE: 10709/14
CURRENT FILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-04-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
67
                          12 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4) US-09-792-793A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 69;
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37.5%; Pred. No. 1.9e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 36.6%; Score 140; DB 15; Best Local Similarity 38.0%; Pred. No. 2.8e-10; Matches 27; Conservative 18; Mismatches 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTHER INFORMATION: Chimeric molecule US-10-001-221A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 28, Application US/09792793A Patent No. US20020168370A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 6
EMOCTH: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 34.8%
Best Local Similarity 37.5%
Matches 24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Ver. 2.0
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61 WVRDSMKHLDQ 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59 YLKMILNKLSQ 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 64 LNKL 67
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TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation FILE REFERENCE: GREN-020/01US
CURRENT APPLICATION NUMBER: US/09/144,838A
CURRENT FILING DATE: 1998-08-31
EARLIER FILING DATE: 1997-09-04
NUMBER OF SEQ ID NOS: 54
SEQ ID NOS: 54
SEQ ID NO 6
LENGTH: 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMI
                                                                                                                             Gaps
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TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PA104
CURRENT APPLICATION NUMBER: US/09/925,302
CURRENT FILING DATE: 2001.08-10
PRIOR APPLICATION NUMBER: CT/US00/05918
PRIOR FILING DATE: 2000-03-08
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 896
SOFTWARE: PATENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 97;
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                                                                            Length
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; Pred. No. 2.7e-09;
16; Mismatches 22;
                                                                     ; Score 133; DB 10;
; Pred. No. 2.5e-09;
16; Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 792, Application US/09925302 Patent No. US20020044941A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6, Application US/09144838A Patent No. US20020051996A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 37.5%;
Matches 24; Conservative 16
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                                                                     Query Match
Best Local Similarity 37.5%;
Matches 24; Conservative 1
; ORGANISM: Homo sapiens
US-09-334-954A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Homo sapiens
US-09-925-302-792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
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82 ISDL 85
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90 ISDL 93
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TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As Amende FILE REFERENCE: 1488.0330000
CURRENT PILING DATE: 1994-06-17
PRIOR APPLICATION NUMBER: US 08/208,339
PRIOR FILING DATE: 1994-06-17
PRIOR APPLICATION NUMBER: US 08/446,881
PRIOR FILING DATE: 1995-05-05
PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1996-09-30
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APPLICANT: Li, Haodong
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynucleotides
TITLE OF INVENTION: (As Amended)
TITLE OF INVENTION: (As Amended)
FILE REFERENCE: 1488.033000C
CURRENT FILING DATE: 1999-06-17
FRICR RAPLICATION NUMBER: US/09/334,954A
CURRENT FILING DATE: 1994-03-08
PRIOR FILING DATE: 1994-03-08
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR APPLICATION NUMBER: US 08/468,775
PRIOR APPLICATION NUMBER: US 08/468,775
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1995-06-06
PRIOR FILING DATE: 1996-09-30
NUMBER OF SEQ ID NOS: 65
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34.8%; Score 133; DB 10; Length 89;
Best Local Similarity 37.5%; Pred. No. 2.5e-09;
Matches. 24; Conservative 16; Mismatches 22; Indels
                                                                                                                                          Sequence 6, Application US/09334923A Patent No. US20020061551A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/09334954A Patent No. US20020076746A1
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 6
LENGTH: 89
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; ORGANISM: Homo sapiens
US-09-334-923A-6
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62 ISDL 65
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82 ISDL 85
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; OTHER INFORMATION: Description of Artificial Sequence: Synthetic US-09-144\*838-6

Ouery Match

34.6%; Score 132; DB 10; Length 73;
Best Local Similarity, 41.1%; Pred. No. 2.7e-09;
Matches 23; Conservative 14; Mismatches 19; Indels 0; Gaps

Search completed: July 28, 2003, 04:20:05 Job time: 10.4223 secs

Sequence Sequence Sequence

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Sequence 31, Application US/08939107
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MCC
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
                                                                                                                          Sequence 10, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 12, Appli
Sequence 2, Appli
Sequence 2007, Appli
Sequence 2007, Appli
Sequence 2007, Appli
Sequence 2007, Appli
Sequence 40, Appli
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1 US-08-939-107-30

1 US-09-067-447-30

1 US-09-067-447-30

1 US-09-067-447-30

1 US-09-067-447-30

1 US-08-569-165A-30

1 US-08-569-165A-30

1 US-08-44-564-2

1 US-08-479-620-2

1 US-08-479-620-2

1 US-08-925-857-12

2 US-08-925-857-12

3 US-08-931-764-2

3 US-08-931-764-2

4 US-09-067-447-2

4 US-09-067-447-2

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5 US-08-931-764-2

6 US-09-067-447-2

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2 US-09-165A-2

3 US-08-931-067-2007

4 US-09-067-447-40

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8 US-09-067-447-80

8 US-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 6300 Sears Tower, 233 Sout
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
IP: 60606-6402
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CLASSIFICATION:
PRIOR APPLICATION NATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                                        Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 31, Appl
Sequence 11, Appl
                                                                                                                                                                                                             (without alignments)
562.075 Million cell updates/sec
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                                                                                                                                                                          July 28, 2003, 04:00:39 ; Search time 79.1471 Seconds
                                                                                                                                                                                                                                                                                US-09-509-165A-31
382
1 GPYGANMEDSVCCRDYVRYR......EICADPRVPYLKMILNKLSQ
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/cgn2_6/ptodata/1/paa/US102_COMB.pep:
/cgn2_6/ptodata/1/paa/US60_COMB.pep:*
                          version 5.1.6
- 2003 Compugen Ltd.
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US-09-067-447-31
US-09-067-447B-31
US-09-509-165A-31
US-60-412-866-1
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                protein search, using sw model
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                             GenCore
Copyright (c) 1993
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Match 1
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Scoring table:

Searched:

Perfect score:

Sequence:

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NESOLO 667-447-31

Sequence 31, Application US/09067447A

Sequence 31, Application US/09067447A

Sequence 31, Application US/09067447A

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

APPLICANT: RAPOrt, Carol J.

TITLE OF INVENTION: ANACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE

TITLE OF INVENTION: ANACROCHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE

TITLE OF INVENTION: ANACROCHAGE DERIVED CHEMOKINE

TITLE OF INVENTION: ANACROCHAGE

TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME

FILE REFERENCE: 27866/34404

CURRENT APPLICATION NUMBER: 08/6939,107

EARLIER RILING DATE: 1999-09-26

EARLIER PILING DATE: 1995-09-67

EARLIER APPLICATION NUMBER: 08/60,542

EARLIER PILING DATE: 1995-10-16

EARLIER RILING DATE: 1995-10-16

EARLIER RILING DATE: 1995-10-16

EARLIER RILING DATE: 1995-10-16

EARLIER RILING DATE: 1995-06-07

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GPYGANMEDSVCCRDYNYRTLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 69;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 382; DB 14;
Pred. No. 5.1e-41;
Mismatches 0;
                            27866/34404
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; S. Best Local Similarity 100.0%; P. Matches 69; Conservative 0;
38,153
                            REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPAX: 312/474-0448
                                                                                                                                                                                 31:
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                                                                                                                                             TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Ver. 2.0.
SEQ ID NO 31
LENGTH: 69
                                                                                                                                                                                                                                                                                                                                        ; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447-31
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 KMILNKLSQ 69
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GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South.Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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APPLICATION NUMBER: US/09/067,447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 382; DB 13;
Best Local Similarity 100.0%; Pred. No. 5.1e-41;
Matches 69; Conservative 0; Mismatches 0;
                                                                                                                          REFERENCE/DOCKET NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPRIX: 25-38-6
TELEX: 25-38-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: GASS, David A.
REGISTRATION NUMBER: 38,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                              TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 31:
                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-939-107-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 KMILNKLSQ 69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Chicago
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TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC
TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
FILE REFERENCE: 2786/34810
CURRENT APPLICATION NUMBER: US/09/509,165A
CURRENT FILING DATE: 2000-06-12
PRIOR PAPLICATION NUMBER: US/09/67,447
PRIOR PAPLICATION NUMBER: 09/067,447
PRIOR FILING DATE: 1998-04-28
PRIOR PAPLICATION NUMBER: 08/39,107
PRIOR FILING DATE: 1999-09-26
PRIOR PELING DATE: 1995-06-07
PRIOR PELING DATE: 1995-11-16
PRIOR APPLICATION NUMBER: 08/558,658
PRIOR FILING DATE: 1995-11-16
PRIOR APPLICATION NUMBER: 08/479,620
PRIOR APPLICATION NUMBER: 08/479,620
PRIOR PELING DATE: 1995-06-07
NUMBER OF SEO ID NOS: 46
SOFTWARE: PATENTIN Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog US-09-509-165A-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL
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GENERAL INFORMATION:
APPLICANT: Demotz et al.
TITLE OF INVENTION: BIOTINYLATED SYNTHETIC CHEMOKINES
FILE REPREBENCE: 29964/38772
CURRENT APPLICATION NUMBER: US/60/412,866
CURRENT FILING DATE: 2002-09-23
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin version 3.1
SEQ ID NO IN OF 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 374; DB 27;
Pred. No. 5.6e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 382; DB 19; Best Local Similarity 100.0%; Pred. No. 5.1e-41; Matches 69; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-939-107-30; Sequence 30, Application US/08939107; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
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97.18;
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Best Local Similarity 97.1°
Matches 67; Conservative
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US-60-412-866-1
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                                                                                      APPLICANT: Chantry, David H.
APPLICANT: Chantry, David H.
APPLICANT: Deeley, Michael C.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
TITLE OF INVENTION: ACTIVITY
NUMBER OF SEQUENCES: 40
OCRESSPONDENCE ADDRESS:
ADDRESSEE: MATSDAIL, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
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                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFWARRE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 100.0%; Score 382; DB 14; Best Local Similarity 100.0%; Pred. No. 5.1e-41; Matches 69; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27866/34404
                                                                                                                                                                                                                                                                                                             STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
FILING DATE: 7-JUN-1996
PRIOR APPLICATION NUMBER: 08/558,658
FILING DATE: 10-V1995
FILING DATE: 10-V1995
FILING DATE: 10-JUN-1995
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: 38,153
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34
TELECOMMUNICATION INFORMATION:
                           Sequence 31, Application US/09067447B GENERAL INFORMATION:
APPLICANT: Gray, Patrick W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-509-165A-31
; Sequence 31, Application US/09509165A
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312/474-6300
312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGIH: 69 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 KMILNKLSQ 69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                          Chicago
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         US-09-067-447B-31
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APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W,
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
CURRENT FILING DATE: 1998-04-28
CURRENT FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: 08/659,658
EARLIER PILING DATE: 1996-06-07
EARLIER PILING DATE: 1995-11-16
EARLIER APPLICATION NUMBER: 08/758,658
EARLIER APPLICATION NUMBER: 08/758,658
EARLIER APPLICATION NUMBER: 08/479,620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
CORPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

97.9%; Score 374; DB 14;
Best Local Similarity 97.1%; Pred. No. 5.6e-40;
Matches 67; Conservative 2; Mismatches 0;
                                                                                                                                                                                           FILING DATE:
PRIOR APPLICATION:
PRIOR APPLICATION DATE:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATE:
APPLICATION DATE: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATE: 08/558,658
FILING DATE: 16-NOV-1995
FILING DATE: 16-NOV-1995
FILING DATE: 16-NOV-1995
FILING DATE: 07-JUN-1995
FILING DATE: 08/479,620
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: GASS, DAVIG A: REFERENCE/DOCKET NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
                                                                                                                                                                        APPLICATION NUMBER: US/09/067,447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 9
Solution 105/09067447A
Sequence 30, Application US/09067447A
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 27 TELECOMMUNICATION:
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312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 70 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-067-447-30
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GENERAL INFORMATION:
APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSANT TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                     APPLICANT: RAPOIT, CATOL J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                        E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                            STATE: 11110018
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READBLE FORM:
MEDIUW TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/939,107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 374; DB 13;
Pred. No. 5.6e-40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
PRIOR APPLICATION:
PRIOR APPLICATION DATA:
PRIOR DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/479,620
PRIOR APPLICATION NUMBER: 08/479,620
FILING DATE: 00-JUN-1995.
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 97.1%;
Matches 67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 312474-0448
TELEX: 25-3856
INFORMATION FOR SEQ. ID NO: 31
SEQUENCE CHARACTERISTICS:
LENGTH: 70 amino acids
Gray, Patrick W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: peptide
                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 KMILNKLSQ 69
                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
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                                                                                                                                                                                   STREET: 6300 (
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                        ADDRESSEE:
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STATE: II
COUNTRY:
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US-09-067-447-30
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g ò United States of America

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DNAX Research Institute
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US-08-925-857-10
Sequence 10, Application US/08925857
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 97.1%;
Matches 67; Conservative 2
                                                                                                              97.9%;
97.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                    Query Match
Best Local Similarity 97.1%
                                       TOPOLOGY: linear MOLECULE TYPE: peptide US-09-067-447B-30
                        single
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 46
SOFTWARE: Patentin Ver.
                                                                                                                                                                                                                                                              61 KMILNKLSQ 69
                                                                                                                                                                                                                                                                                   61 KMILNKLSQ 69
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     TYPE: amino (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 30
LENGTH: 70
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APPLICANT: Chartry, David H.

APPLICANT: Deeley, Michael C.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND

TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC

WINDOW OF DEFINITION: ACTIVITY
                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                          1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
                                                                                                                                                                                                                                                                             2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
                                                                                                          FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog
US-09-067-447-30
                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                      Length 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
ADPLICATION DATA:
                                                                                                                                                                                                                      0
                                                                                                                                                                                  Score 374; DB 14;
Pred. No. 5.6e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/067,447B
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APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/578,658
FILING DATE: 10-NOV-1995
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RY: United States of America 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-067-447B-30; Sequence 30, Application US/09067447B; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Gass, David A. REGISTRATION NUMBER: 38,153
                                                                      TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                  Query Match 97.9%;
Best Local Similarity 97.1%;
Matches 67; Conservative
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 30
LENGTH: 70
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INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                 61 KMILNKLSQ 69
                                                                                                                                                                                                                                                                                                                                                      COUNTRY: Unit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Chicago
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                                                                                                                                                     2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog US-09-509-165A-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MDC ANALOGS, MDC
                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANA TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANA TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF FILE REFERENCE: 27666/34810
CURRENT APPLICATION NUMBER: US/09/509,165A
CURRENT FILING DATE: 1909-04-28
PRIOR FILING DATE: 1998-04-28
PRIOR FILING DATE: 1998-04-28
PRIOR FILING DATE: 1996-06-07
PRIOR FILING DATE: 1996-06-07
PRIOR FILING DATE: 1996-06-07
PRIOR PRILING DATE: 1996-06-07
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APPLICANT: Hedrick, Albert
APPLICANT: Zlotnik, Albert
TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 374; DB 19; Length 70;
Pred. No. 5.6e-40;
2; Mismatches 0; Indels
Length 70;
                                                            0; Indels
Score 374; DB 14;
Pred. No. 5.6e-40;
2; Mismatches 0;
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97.98;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 97.9
Best Local Similarity 97.1
Matches 67; Conservative
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) MOLECULE TYPE: PROTEIN US-08-464-594-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 KMILNKLSQ 69
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                                                       STREET: 6 BECKER E
CITY: ROSELAND
STATE: NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AMINO ACID
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                                                                                                                                                                                                             US-08-464-594-2
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GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Rottman
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: TARC IN SKIN LYMPHOCYTE HOMING
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: PCT/USO0/00953
CURRENT APPLICATION NUMBER: PCT/USO0/00953
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NOS: 6
SEQ I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 97.9%; Score 374; DB 1; Length 93; Best Local Similarity 97.1%; Pred. No. 7.8e-40; Matches 67; Conservative 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: 09-SEP-1997
FILING DATE: 09-SEP-1997
CCASSIFICATION: 0436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 374; DB 13;
Pred. No. 7.1e-40;
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                                                                                                                                                                                                                                                                                                                                                                                                                           PRICE APPLICATION DATA:
APPLICATION NUMBER: US 60/025,724
FILING DATE: 10-5EP-1996
ATTORNEY AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELEPHONE: 650-852-9196
901 California Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 650-496-1200
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 86 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 97.9%;
Best Local Similarity 97.1%;
Matches 67; Conservative
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PCT-US00-00953-6
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                             Palo Alto
California
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                                                                                           COUNTRY:
                             CITY: F
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1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
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STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
TITLE OF INTENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 374; DB 8;
Pred. No. 7.8e-40;
2; Mismatches 0;
                                                     APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
TITLE OF INVENTION: B
CORRESPONDENCE: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARRLLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 INCH DISKETTE

COMPUTER: IBM PS/2

OPERATING SYSTEM: MS-DOS

SOFTWARE: WORD PERFECT 5.1

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/464,594

FILING DATE: June 5, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       325800-443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-479-620-2; Sequence 2, Application US/08479620; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 3258
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEPHONE: 201-994-1744
Sequence 2, Application US/08464594 GENERAL INFORMATION:
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STATE: Lilings
COUNTRY: United States of America
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBP C compatible
OPERATING SYSTEM: PC-LOSC/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NAMES: B. 10.0
FLILNG DATE: THOROMATION:
REGISTRATION NUMBER: 38 153
REPERENCE/DOCKET NUMBER: 2866/32628
FILLNG GASS, David A.
NAME: GASS, David A.
REGISTRATION NUMBER: 38 1153
REPERENCE/DOCKET NUMBER: 2866/32628
FILLNG GASS, David A.
NAME: CASS, David A.
SEGUENCE CHRACATORY
FILLNG AND INFORMATION:
NAME: CASS, David A.
FILLSTATION NUMBER: 38 1153
REPERENCE/DOCKET NUMBER: 2866/3268
FILLNG GASS, David A.
FILLSTATION NUMBER: 37474-630
FILLERAX: 312474-648
FILLSTATION ON SEC ID NO: 2:
FILLSTATION ON SEC ID NO: 3:
FILLSTATION ON SEC ID NO: 3:
FILLSTATION ON SEC ID NO: 4:
FILLSTATION ON SEC ID NO: 4:
FILLSTATION ON SEC ID NO: 5:
FILLSTATION ON SEC ID NO: 5:
FILLSTATION ON SEC ID NO: 5:
FILLSTATION ON SEC ID NO: 6:
FILLSTATION ON SEC ID NO: 7: 8e-40;
FILLSTATION ON SEC ID NO: 6:
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Search completed: July 28, 2003, 04:14:54 Job time: 79:1471 secs

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us-09-509-165a-31.rapn

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748.942 Million cell updates/sec
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                                                                                                          July 28, 2003, 04:02:59; Search time 24.3529 Seconds
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1 GPYGANMEDSVCCRDYVRYR.....EICADPRVPYLKMILNKLSQ
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Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                   1232328 segs, 264332421 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Listing first 45 summaries
                                                                       - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Maximum Match 100%
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                   US-09-509-165A-31
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Sequence:
                                                                                                                                                                                                                                                           Scoring table:
                                                                       OM protein
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                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                        Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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/cgn2\_6/ptodata/2/paa/US06\_NEW\_COMB.pep4:\*
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/cgn2\_6/ptodata/2/paa/US08\_NEW\_COMB.pep:\*
/cgn2\_6/ptodata/2/paa/US09\_NEW\_COMB.pep5:\*
/cgn2\_6/ptodata/2/paa/US09\_NEW\_COMB.pep5:\*

### SUMMARIES

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Result No.	Score	Query Match	Query Match Length DB	DB.	QI.	Description
				: : :		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
-	374	97.9	69	12	US-10-341-931-2	Sequence 2, Appli
7	374	97.9	93	7	PCT-US02-35606-109	•
m	374	97.9	93	7	PCT-US02-35606-146	Sequence 146, App
4	374	97.9	93	7	PCT-US02-40891-473	
ស	374	97.9	93	7	PCT-US02-40891-549	
9	374	97.9	93	7	PCT-US02-40891-638	
7	374	97.9	93	7	PCT-US02-40891-639	Sequence 639, App
80	374	97.9	93	7	PCT-US02-40891-640	Sequence 640, App
6	374	97.9	93	7	PCT-US02-40891-641	Sequence 641, App
10	374	97.9	93	12	US-10-314-410-2	Sequence 2, Appli
11	374	97.9	93	12	US-10-405-027-5105 .	Sequence 5105, Ap
12	374	97.9	93	12	US-10-445-790-2	Sequence 2, Appli
13	374	97.9	93	14	US-60-453-135-8659	Sequence 8659, Ap
14	374	97.9	93	14	US-60-453-050-8659	Sequence 8659, Ap
15	374	97.9	93	14	US-60-455-444-4765	Sequence 4765, Ap
16	374	97.9	93	14	US-60-465-241-4765	Sequence 4765, Ap
17	374	97.9	93	14	US-60-466-412-8659	Sequence 8659, Ap
18	374	97.9	172	12	US-10-335-394-49	Sequence 49, Appl
19	374	97.9	334	12	US-10-335-394-53	

Sequence 50, Appl Sequence 313, App Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli	422, 424, 423, 425,	Sequence 3, Appli Sequence 3, Appli Sequence 7, Appli Sequence 7, Appli	546, A 562, 562,	Sequence 504, App Sequence 565, App Sequence 567, App Sequence 6, App Sequence 6, App is
12 US-10-335-394-50 2 PCT-US02-40891-333 12 US-10-285-572-2 12 US-10-137-438A-2 12 US-10-406-494-2	2 PCT-US02-40891-422 2 PCT-US02-40891-257 2 PCT-US02-40891-424 2 PCT-US02-40891-423 2 PCT-US02-40891-425	10 US-09-839-445-3 12 US-10-001-221A-3 10 US-09-839-445-7 12 US-10-001-221A-7 10 US-00-839-445-6	US- PCT- PCT-	2 PCT-USO2-40891-364 2 PCT-USO2-40891-565 2 PCT-USO2-40891-566 2 PCT-USO2-40891-567 12 US-10-165-233A-6 12 US-10-405-027-2964
587 678 93 93	677 678 676 677 676	68 67 67	. K & & & & & & & & & & & & & & & & & &	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
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222 222 243 243 243 243	222 222 284 284 284	93210	, w w w w w w w w w w w w w w w w w w w	444 444 45 454

# ALIGNMENTS

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APPLICANT: Pal, Ranajit.
APPLICANT: Pal, Ranajit.
APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: Macrophage Derived Chemokine (MDC) as an Anti-viral Agent for TITLE OF INVENTION: Treatment and Prevention of Lentivirus Infection
FILE REPERENCE: 00784 SRP
CURRENT APPLICATION NUMBER: US/10/341,931
CURRENT FILING DATE: 1997-09-16
PRIOR PRILING DATE: 1997-09-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 374; DB 12;
Pred. No. 1.6e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCT-US02-35606-109; Sequence 109, Application PC/TUS0235606; Sequence 1NFORMATION: APPLICANT: Human Genome Sciences, Inc.
                    Sequence 2, Application US/10341931 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 2
SOFTWARE: PatentIn version 3.2
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 97.9%;
Best Local Similarity 97.1%;
Matches 67; Conservative ;
                                                        APPLICANT: DeVico, Anthony L. APPLICANT: Pal, Ranajit
                                                                                                                                                                                                                                                                                                                                                                                      ) ORGANISM: Homo sapiens
US-10-341-931-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 KMILNKLSQ 69
US-10-341-931-2
                                                                                                                                                                                                                                                                                                                                                  LENGTH: 69
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CURRENAL INFORMATION:

APPLICANT: Human Genome Sciences, Inc.

TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PC1

CURRENT APPLICATION NUMBER: PCT/US02/40891

CURRENT FILING DATE: 2002-12-23

PRIOR PELICATION NUMBER: 60/360,000

PRIOR FILING DATE: 2002-02-28

PRIOR APPLICATION NUMBER: 60/389,950

PRIOR FILING DATE: 2002-05-10

PRIOR FILING DATE: 2002-05-10

PRIOR PELICATION NUMBER: 60/411,355

PRIOR FILING DATE: 2002-09-18

PRIOR FILING DATE: 2002-10-29

PRIOR FILING DATE: 2002-10-29

PRIOR FILING DATE: 2002-10-12

PRIOR FILING DATE: 2002-10-13

PRIOR FILING DATE: 2002-110-23

PRIOR FILING DATE: 2002-110-23

PRIOR FILING DATE: 2002-110-3

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Pred. No. 2.3e-40;
2; Mismatches 0;
                  PRIOR APPLICATION NUMBER: 60/398,008
PRIOR FILING DATE: 2002-00-24
PRIOR APPLICATION NUMBER: 60/411,355
PRIOR PELLING DATE: 2002-09-18
PRIOR PELLING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: 60/414,984
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR FILING DATE: 2002-10-11
PRIOR FILING DATE: 2002-10-23
PRIOR FILING DATE: 2002-11-05
PRIOR FILING DATE: 2002-11-05
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR APPLICATION NUMBER: 60/433,623
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97.9%;
97.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 473
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Best Local Similarity 97.1'
Matches 67; Conservative
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PCT-US02-40891-473
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85 KMILNKLSQ 93
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                                                                                                                                                                                                                                                                                                                                                                                                       Score 374; DB 2; Length 93; Pred: No. 2.3e-40; 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: 41 Human Secreted Proteins
FILE REFERENCE: PS740PCT
CURRENT APPLICATION NUMBER: PCT/US02/35606
CURRENT FILING DATE: 2002-11-06
PRIOR APPLICATION NUMBER: 60/331,046
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEC. DID NOS: 160
SOFTWARE: PATENTIN VET. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT FILICATION NUMBER: PCT/US02/40891
CURRENT FILICATION NUMBER: PCT/US02/40891
CURRENT FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR PILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-22-8
PRIOR FILING DATE: 2002-28
PRIOR PLICATION NUMBER: 60/378,950
TITLE OF INVENTION: 41 Human Secreted Proteins
                  FILE REFERENCE: PS740PCT
CURRENT APPLICATION NUMBER: PCT/US02/35606
CURRENT FILING DATE: 2002-11-06
PRIOR APPLICATION NUMBER: 60/331,046
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 160
SOFTWARE: PATENTIN VET. 2.0
SOFTWARE: PATENTIN VET. 2.0
LENGTH: 93
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                                                                                                                                                                                                                                                                                                                                                                                                          97.9%;
97.1%;
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Best Local Similarity 97.1%;
Matches 67; Conservative
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Best Local Similarity 97.1'
Matches 67; Conservative
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CORGANISM: Homo sapiens
PCT-US02-35606-146
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PCT-US02-35606-109
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PCT-US02-40891-473
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                                                                                                                                                                                                                                                                                            TYPE: PRT
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ORGANISM: Homo sapiens
PCT-US02-40891-639
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NUMBER OF SEQ ID NOS: 2222
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 638
                                                   Length 93;
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Pred. No. 2.3e-40;
2; Mismatches 0; Indels
                                                Score 374; DB 2;
Pred. No. 2.3e-40;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INFORMATION:
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT PEPLICATION NUMBER: PCT/USO2/40891
CURRENT FILING DATE: 2002-12-23
PRIOR APPLICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-12-28
RIGH APPLICATION NUMBER: 60/360,000
PRIOR FILING DATE: 2002-02-8
PRIOR FILING DATE: 2002-02-18
PRIOR FILING DATE: 2002-03-19
PRIOR PILING DATE: 2002-09-18
PRIOR PRILING DATE: 2002-09-18
PRIOR PRILING DATE: 2002-09-18
PRIOR PRILING DATE: 2002-09-18
PRIOR PRILING DATE: 2002-10-02
PRIOR PRILING DATE: 2002-10-02
PRIOR PRILING DATE: 2002-10-02
PRIOR PPLICATION NUMBER: 60/414,984
PRIOR PRILING DATE: 2002-10-02
PRIOR PPLICATION NUMBER: 60/414,984
PRIOR PPLICATION NUMBER: 60/414,984
PRIOR PPLICATION NUMBER: 60/413,613
PRIOR PPLICATION NUMBER: 60/420,246
PRIOR PPLICATION NUMBER: 60/423,623
PRIOR PPLICATION NUMBER: 60/423,623
PRIOR PPLICATION NUMBER: 60/433,639
PRIOR PILING DATE: 2002-11-05
PRIOR PPLICATION NUMBER: 60/433,639
PRIOR FILING DATE: 2002-11-05
PRIOR PPLICATION NUMBER: 60/433,623
PRIOR PPLICATION NUMBER: 60/434
PRIOR PPLICATION NUMBER: 60/433,623
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GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 638, Application PC/TUS0240891 GENERAL INFORMATION:
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Best Local Similarity 97.1%;
Matches 67; Conservative
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Best Local Similarity 97.1
Matches 67; Conservative
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PCT-US02-40891-638
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PCT-US02-40891-549
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CURRENT PLILING DATE: 2002-12-31

PRIOR APPLICATION NUMBER: 06741, 111

PRIOR PLILING DATE: 2001-12-31

PRIOR ETLING DATE: 2001-12-31

PRIOR ETLING DATE: 3001-12-31

PRIOR ETLING DATE: 3001-12-31

PRIOR ETLING DATE: 3002-07-34

PRIOR ETLING DATE: 3002-01-16-16-34

PRIOR ETLING DATE: 3002-01-16-17-16-34

PRIOR ETLING DATE: 3002-01-16-34

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  1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
  25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLIFRDKEICADPRVPWV 84
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
  25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
   SERIORANI INCRMATION:

APPLICANT: Human Genome Sciences, Inc.

TITLE OF INVERMITON: Albumin Fusion Proteins
FILE REFERENCE: PF564PCT
CURRENT APPLICATION NUMBER: PCT/USO2/40891
CURRENT FILING DATE: 2002-12-3
FRIOR PRICATION NUMBER: 60/341,811
FRIOR FILING DATE: 2001-12-21
FRIOR FILING DATE: 2002-02-28
FRIOR FILING DATE: 2002-02-08
FRIOR FILING DATE: 2002-05-10
FRIOR FILING DATE: 2002-05-10
FRIOR FILING DATE: 2002-05-10
FRIOR FILING DATE: 2002-07-24
FRIOR FILING DATE: 2002-07-24
FRIOR FILING DATE: 2002-10-11
FRIOR FILING DATE: 2002-10-11
FRIOR FILING DATE: 2002-10-11
FRIOR FILING DATE: 2002-10-01
FRIOR FILING DATE: 2002-11-05
FRIOR FILING DATE: 2002-01-28
Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 2222
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 640
LENCTH: 93
  DB 2; Length 93; 2.3e-40;
  0; Indels
  Score 374; DB 2;
Pred. No. 2.3e-40;
3; Mismatches 0
   Score 374; DB Pred. No. 2.3e-2; Mismatches
   Sequence 641, Application PC/TUS0240891 GENERAL INFORMATION:
   Query Match
Best Local Similarity 97.1%;
Matches 67; Conservative 7
   Query Match 97.9%;
Best Local Similarity 97.1%;
Matches 67; Conservative ;
  NUMBER OF SEQ ID NOS: 2222
SOFTWARE: Patentin Ver. 2.0
  ; ORGANISM: Homo sapiens
PCT-US02-40891-641
   ; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US02-40891-640
  KMILNKLSQ 69
   61 KMILNKLSQ 69
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  TYPE: PRT
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Sequence 2. Application US/10314410
Sequence 2. Application US/10314410
Sequence 2. Application US/10314410
Sequence 2. Application.
Sequence 2. Application.
Sequence 2. Application.
APPLICANT: Gearing, David P.
APPLICANT: Gearing, David P.
TITLE OF INVENTION: PROGNASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC AND OTHER
TITLE OF INVENTION: USES
TITLE OF INVENTION: USES
FILE REPERBNCE: 0734-324001
CURRENT APPLICATION NUMBER: US/09/811,088
PRIOR APPLICATION NUMBER: US/09/811,088
PRIOR APPLICATION NUMBER: US/09/811,088
PRIOR PELING DATE: 2001-03-16
PRIOR FILING DATE: 2001-01-14
PRIOR FILING DATE: 1997-03-12
PRIOR APPLICATION NUMBER: US/08/843,651
PRIOR APPLICATION NUMBER: US/08/843,651
PRIOR PILING DATE: 1997-04-16
PRIOR FILING DATE: 1999-07-16
PRIOR FILING DATE: 1999-07-16
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  1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
  25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWW 84
  Gaps
  Length 93;
  Indels
  Query Match 97.9%; Score 374; DB 12; Best Local Similarity 97.1%; Pred. No. 2.3e-40; Matches 67; Conservative 2; Mismatches 0;
  Score 374; DB 12;
Pred. No. 2.3e-40;
   TITLE OF INVENTION: Human Secreted Proteins FILE REFERENCE: PS806D; FILE REFERENCE: PS806D; CURRENT APPLICATION NUMBER: US/10/405,027 CURRENT APPLICATION NUMBER: 06/369,608 PRIOR FILING DATE: 2003-04-04 PRIOR FILING DATE: 2002-04-04 PRIOR FILING DATE: 2002-04-30 NUMBER OF SEQ ID NOS: 5810 SOFTWARE: PATENTIN Ver: 2.0 SEQ ID NO 5105 LENGTH: 93
   NUMBER OF SEQ ID NOS: 24 SOFTWARE: FastSEQ for Windows Version 4.0
  Sequence 5105, Application US/10405027 GENERAL INFORMATION:
  97.9%;
97.1%;
   ; ORGANISM: Homo sapiens
US-10-405-027-5105
   Query Match
Best Local Similarity
   61 KMILNKLSQ
  RESULT 11
US-10-405-027-5105
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Sequence 4765, Application US/60455444
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVUCH, Ann
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATIOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REPERENCE: CL001455
CURRENT PILING DATE: 2003-03-18
CURRENT FILING DATE: 2003-03-18
NUMBER OF SEQ ID NOS: 50986
SOFTWARE: FastSEQ for Windows Version 4.0
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   1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
    1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
   25 GPYGANMEDSVCCRDYVRYRLPLRIVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
                           25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
  Gaps
   APPLICANT: LUKE, MAY
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLOO1457
CURRENT APPLICATION NUMBER: US/60/453,050
CURRENT FILING DATE: 2003-03-10
NUMBER OF SEC ID NOS: 82762
SOFTWARE: FastseQ for Windows Version 4.0
SEQ ID NO 8659
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   ch 97.9%; Score 374; DB 14; Length 93; I Similarity 97.1%; Pred. No. 2.3e-40; 67; Conservative 2; Mismatches 0; Indels
  Indels
   Score 374; DB 14;
Pred. No. 2.3e-40;
  2; Mismatches
  ; Sequence 8659, Application US/60453050
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele
   Query Match 97.9%;
Best Local Similarity 97.1%;
Matches 67; Conservative 2
   61 KMILNKLSQ 69
  ; ORGANISM: Homo sapiens
US-60-453-050-8659
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  APPLICANT: Devico, Anthony L.
APPLICANT: Devico, Anthony L.
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TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
FILE REFERENCE: 4115-109 CIP DIV
CURRENT FILIKO DATE: 1903-05-27
FILE REPLIANG DATE: 2003-05-27
PRIOR PELING DATE: 1998-12-11
PRIOR PELING DATE: 2000-12-06
PRIOR FILING DATE: 2000-12-06
PRIOR FILING DATE: 2000-03-02
PRIOR FILING DATE: 2000-03-02
PRIOR FILING DATE: 1997-12-11
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NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
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  APPLICANT: CARGILL, Michele
APPLICANT: CARGILL, Michele
APPLICANT: CARGILL, Michele
APPLICANT: ARGUBOVA, 01ga
TITLE OF INVENTION: GENERALIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: WICCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001456
CURRENT APPLICATION NUMBER: US/60/453,135
CURRENT PILING DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
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Search completed: July 28, 2003, 04:18:50 Job time: 24.3529 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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- protein search, using sw model OM protein July 28, 2003, 04:01:18 ; Search time 6.81303 Seconds Run on:

(without alignments) 973.617 Million cell updates/sec

US-09-509-165A-31 Title:

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Total number of hits satisfying chosen parameters:

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Searched:

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Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR\_73:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
1: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### STIMMARTES

|               |       | ф      |             |    | SUMMAKIES |                      |
|---------------|-------|--------|-------------|----|-----------|----------------------|
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| 7             | 119   | 31.2   | 91          | Н  | A28815    |                      |
| e             | 119   | 4      |             | ~  | A32393    |                      |
| 4             | 117   | 30.6   |             | -  | A46539    | monocyte chemoattr   |
| 'n            | 117   | ö      |             | ~  | A30574    | macrophage inflamm   |
| 9             | 111.5 | σ,     |             | Н  | A31767    |                      |
| 7             | 110.5 | 28.9   |             | 7  | C30552    |                      |
| <b>œ</b>      | 110   | 28.8   |             | 7  | B35673    | LD78-beta protein    |
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| 14            | 93.5  | 24.5   |             | 7  | 149555    | gene Č10 protein -   |
| 12            | 93    | 24 . 3 |             | ~  | A60299    |                      |
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| 17            | 90.5  | 23.7   | -           | -  | A30209    | PDGF-inducible JE    |
| 18            | 88.5  | 23.5   |             | Н  | A39296    | . monocyte chemoattr |
| 19            | 88.5  | 23.2   | 66          | 7  | JC2336    | monocyte chemoattr   |
| 20            | 87    | 22.8   |             | ~  | JC4912    | eotaxin precursor    |
| 21            | 82    | 22.3   |             | ~  | C60407    | monocyte adherence   |
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| 23            | . 81  | 21.2   |             | ~  | 148099    | eotaxin precursor    |
| 24            | 80    | 20.5   |             | N  | JC2478    | eotaxin precursor    |
| 25            | 78.5  | 20.5   |             | ~  | JE0177    | lymphocyte and mon   |
| 56            | 76    | 19.9   |             | 7  | ETHUL     | lymphotactin precu   |
| 27            | 75    | 19.6   |             | ~  | A37236    | I-309 protein prec   |
| 28            | 71.5  | 18.7   | 92          | ~  | 24        | TCA3 protein - mou   |
| 29            | 71.5  | 18.7   | 125         | 7  | 146857    | monocyte chemoattr   |

| neutrophil-activat<br>granulocyte chemot | C-X-C chemokine LI<br>ferrichrome sidero | carboxy-terminal p | monocyte chemotact | alveolar macrophag | monocytic cytokine | lymphotactin precu | hypothetical prote | conserved hypothet | granulocyte chemot | macrotetrolide res | hypothetical prote | protein let-23 [im |
|------------------------------------------|------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| A55010<br>A54188                         | A57325<br>T52486                         | JH0263             | A55984             | B44253             | A48093             | ETMSL              | G83264             | D72323             | B54188             | JH0655             | T02288             | E88257             |
| 000                                      | 77                                       | ~ ~                | 1 (1               | ~                  | N                  |                    | ~                  | ~                  | N                  | ~                  | Ġ                  | 7                  |
| 114                                      | 132<br>3947                              | 539                | 72                 | 117                | 97                 | 114                | 948                | 206                | 75                 | 279                | 318                | 1323               |
| 18.6                                     | 18.3<br>18.2                             | 17.9               | 17.7               | 17.5               | 17.4               | 16.8               | 16.8               | 16.4               | 16.0               | 16.0               | 16.0               | 16.0               |
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| 70                                       | 70<br>69.5                               | 68.5               | 67.5               | 9                  | . 99               | 9                  | 9                  | 62.                | 9                  | 9                  | 9                  | 9                  |

## ALIGNMENTS

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C;Accession: 15232
R;Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Biochem. Biophys. Res. Commun. 211, 289-295, 1995
A;Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat
A;Reference number: 152322; MUID:95298037; PMID:7779098
A;Accession: 152322
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NyAlternate chemoattractant cytokine RANTES precursor - human
NyAlternate names: small inducible cytokine A5; T-cell specific cytokine RANTES
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C;Date: Homo sapiens (man)
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C;Accession: A28815
R;Schall, T.J.; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M.;
J. Immunol. 141, 1018-1025, 1988
A;Title: A human T cell-specific molecule is a member of a new gene family.
A;Reference number: A28815; MUID:88285659; PMID:2456327

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A; Residues: 24-33,'XX',36-54 <SHE>
R; Wolpe, S.D.; Davatelis, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.; M=1
D. Exp. Med. 167, 570-581, 1988
A; Title: Macrophages secrete a novel heparin-binding protein with inflammatory and ==
A; Reference number: A27596; MUID:88154745; PMID:3279154
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A; Residues: 26-84, 30-Pro, and 39-Thr were also found
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R; Widden, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Ceraml, A.
J. Immunol. 146, 4031-4040, 1991
A; Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and co-s
A; Reference number: 156104; MUID:91237116; PMID:2033269
   A;Cross-references: EMBL:U02298; NID:9460090, PIDN:AAA18302.1; PID:9460091
R;Schall, T.J.; Simpson, N.J.; Mak, J.Y.
Eur. J. Immunol. 22, 1477-1481, 1992
A;Title: Molecular cloning and expression of the murine RANTES cytokine: structura Da A;Reference number: A46539; MUID:92289805; PMID:1376260
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A; Cross references: macrophage cell line PU5-1.8
A; Note: sequence extracted from NCBI backbone (NCBIN:106768, NCBIP:106770)
R; Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A
Mol. Cell. Biol. 14, 2914-2925, 1994
A; Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking many R; Reference number: 148654; MUID:94217689; PMID:7513046
  C; Species: Mus musculus (house mouse)
C; Species: Mus musculus (house mouse)
C; Date: 18-10n-1993 #sequence_revision 16-Aug-1996 #text_change 22-Jun-1999
C; Accession: I48875; A46539; I48644; I55970
R; Danoff, T.M.; Lalley, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
J. Immunol. 152, 1182-1189, 1994
A, Title: Cloning, genomic organization, and chromosomal localization of the Scya5 and Reference number: I48875; MuID:94132613; PMID:7507961
  25 PYGAD-TPTACCFSYSR-KIPRQFIVDYFETSSLCSQPGVIFLTKRNRQICADSKETWVQ 82
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R; Davatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos, C.; C
J. Exp. Med. 167, 1939-1944, 1988
J*Title: Cloning and characterization of a cDNA for murine macrophage inflammatory prote
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A; Cross-references: GB:M23447; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.; Mas
J. Exp. Med. 168, 2251-2259, 1988
A; Title: Resolution of the two components of macrophage inflammatory protein 1, and clor
A; Reference number: JL0088; MUID:89067830; PMID:3058856
A; Molecule type: mRNA
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A; Cross-references: EMBL:X53372; NID:954062; PIDN:CAA37452.1; PID:9297531
A; Note: the authors' translation of the nucleotide sequence differs at several positions R; Kwon, B.S.; Weissman, S.M.
B; Kwon, B.S.; Weissman, S.M.
A; Title: CDNA sequence of two inducible T-cell genes.
A; Title: CDNA sequence of two inducible T-cell genes.
A; Reference number: A32393; MUID:89184547; PMID:2784565
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N;Alternate names: heparin-binding chemotaxis protein; L2G25B protein; SCI/MIP-la; SIS a
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C;Accession: S11685; A32393; SO4533; A53885; A30552; PS0303; A27596; I56104
C;Accession: S11685; A32393; SO4533; A53881, I; Plumb, M.
Nucleic Acids Res. 18, 5561, 1990
A;Title: Sequence of the muxine haemopoletic stem cell inhibitor/macrophage inflammatory
A;Reference number: S11685; MUID:91016858; PMID:2216738
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R;Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A;Title: A family of small inducible proteins secreted by leukocytes are members of a
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R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell prolif
A;Reference number: A30412; MUID:91103879; PMID:2271120
  R;Neilson, E.G.; Krensky, A.
Kidney Int. 41, 220-225, 1992
A;Title: Isolation and characterization of cDNA from renal tubular epithelium encoding
A;Reference number: 156970; MUID:92277990; PMID:1375672
   two closely related genes which
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  R;Obaru, K.; Fukuda, M.; Maeda, S.; Shimada, K.
J. Biochem. 99, 885-894, 1986
A;Title: A CDNA clone used to study mRNA inducible in human tonsillar lymphocytes by A;Feference number: A24198; MUID:86223879; PMID:3086300
A;Accession: A24198
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C; Accession: A55673; A30574; A30412; A24198; A30908
R; Nakao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3568, 1990
A; Title: Structures of human genes coding for cytokine LD78 and their expres A; Reference number: A35673; MUID:90287155; PMID:1694014
   2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
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A;Title: Mitogenic activation of human T cells induces two closely relations and the complex and
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B;Napolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarra, J.R.; Seuanez, H.N.; Leonard, W. J. Biol. Chem. 266, 17531-17536, 1991
A;Title: The gene encoding the Act-2 cytckine. Genomic structure, HTLV-I/tax responsing A;Reference number: A40978; MUID:91373378; PMID:1894635
  A;Title: Mitogenic activation of human T cells induces two closely related genes whic A;Reference number: A30574; MUID:89140347; PMID:2521882
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A; Cross references: GB: M69201; NID: 9178021
A; Note: 15-Ala was also found
R; Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
Proc. Natl. Acad. Sci. US. SA. 85, 9704-9708, 1988
A; Title: Identification, cloning, and characterization of an immune activation gene.
A; Reference number: A31767; MUID: 89071764; PMID: 2462251
A;Gene: GDB:SCYA3
A;Cross-references: GDB:120368; OMIM:182283
A;Arcoss-references: GDB:120368; OMIM:182283
C;Superfamily: macrophage inflammatory protein
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A; Residues: 1-92 <LIP>
A; Cross-references: GB: J04130; NID: g178017; PIDN: AAA51576.1; PID: g178018
R; Chaq, H.C.; Reinherz, E.L.
Eur. J. Immunol. 19, 1045-1051, 1989
  10 SVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKL
   A; Wolecule type: mRNA
A; Residues: 1-19, L', Z1-92 <ZIP>
A; Cross-references: GB:MZ5316; NID:g602454; PIDN:AAA57256.1; PID:g602455
A; Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. 143, 2907-2916, 1989
A; Titles: A novel polypeptide secreted by activated human T lymphocytes.
A; Reference number: A45817; MUID:90038522; PMID:2809212
   A;cross_references: GB:X16166; NID:g32035; PIDN:CAA34291.1; PID:g32036
R;Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
J.: Immunol. 142, 1582-1590, 1989
  Length 92;
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31.0%; Pred. No. 3.4e-07;
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nes 18; Conservative
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Nighternate names: macrophage inflammatory protein homolog GOS19-2; small inducible C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 20-Jun-2000
C; Date: 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 20-Jun-2000
C; Accession: B35673; B30412; S10157; B30908
R; Nakao, M : Nomiyama, H : Shimada, K .
Mol. Cell. Biol. 10, 3464-358, 1990
A; Title: Structures of human genes coding for cytokine LD78 and their expression.
A; Reference number: A35673; MUID:90287155; PMID:1694014
   A;Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666 C;Comment: This protein is a member of a "small inducible" or "activation specific
   A.Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g18284 R; Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Nucleic Acids Res. 18, 3261-3270, 1990 A; Title: Two inflammatory mediator cytokine genes are closely linked and variably A; Reference number: S10157; MUID:90287702; PMID:1972563
  R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell
A;Reference number: A30412; WUID:91103879; PMID:2271120
A;Accession: B30412
   25 PMGSDPPTS-CCFSYTSRQLHRSFVMDYYETSSLCSKPAVVFLTKRGRQICANPSEPWVT 83
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C;Reywords: cytokine
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29.3%; Pred. No. 2.4e-06;
Mismatches 25;
  DB 2;
  29;
  28.9%; Score 110.5; DB 2 36.4%; Pred. No. 2.1e-06; vative 12; Mismatches 29
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A;Introns: 26/1; 64/2
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Best Local Similarity
Matches 24; Conserv
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  62 MILNKL 67
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A;Introns: 26/1; 64/2
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  A; Accession:
   C; Genetics:
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A; Residues: 1.39, RRNAS, 46-92 < BRO>
A; Molecule type: mRNA
A; Residues: 1.39, RRASS', 46-92 < BRO>
A; Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
R; Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
Submitted to the Brookhaven Protein Data Bank, January 1994
A; Reference number: A52206; PBB:1HUM
A; Contents: annotation; Conformation and disulfide bond assignments by (1)H-NNK, residue
C; Comment: This protein is secreted by activated lymphocytes and monocytes. It is bound
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A; Gene: GDB:LAG1
A; Cross-references: GDB:127451; OMIM:153335
A; Map position: 17421-17421
A; Introns: 26/1; 64/2
C; Superfamily: macrophage inflammatory protein
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F; 24-92/Product: macrophage inflammatory protein 1 Deta #status experimental
F; 34-58,35-74/Disulfide bonds: #status experimental
  a ne
  Cross references: GB:M23503; NID:g533244; PIDN:AAA40148.1; PID:g533245; Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.; Mas. Exp. Med. 168, 2251-2259, 1988
  рe
   A;Title: Resolution of the two components of macrophage inflammatory protein 1, and clor
A;Reference number: JL0088; MUID:89067830; PMID:3058856
   A; Molecule type: mRNA
A; Residues: 7-55, 11',57-79, 'T',81-92 <MIL>
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A; Cross-references: GB:M57503; NID:g339726; PIDN:AAA36752.1; PID:g339727
B; Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Inmunol. 142, 679-687, 1989
A; Title: A family of small inducible proteins secreted by leukocytes are members of a naterious activation processes.
S of various activation processes.
A; Reference number: A30552; MUID:89093958; PMID:2521353
  macrophage inflammatory protein 1-beta precursor - mouse
NyAlternate names: 14400: Sis gamma; T-ceil activation protein gamma
C;Species: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Date: 28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999
C;Accession: C30552; Ji00088; PS0304; S22042
R;Brown, R.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A;Title: A family of small inducible proteins secreted by leukocytes are members of
   Σ
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A; Residues: 24-33, XX, 36, XX, 38 <SH2>
A; Residues: 24-33, XX, 76, X, 28 delay and a submitted to the EMBL Data Library, October 1991
submitted to the EMBL Data Library, October 1991
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A; Reference number: $22042
A; Accession: $22042
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  A;Wolecule type: DNA-A;Residues: 1-92 <DAU>A;Residues: 1-92 <DAU>A;Cross-references: EMBL:X62502; NID:953126; PIDN:CAA44364.1; PID:953127
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A; Residues: 1.92 cmENA
A; Residues: references: GB:M35590; NID:g199696; PIDN:AAA39708.1; PID:g199697
A; Accession: PS0304
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   A; Accession: D30552
   Query Match
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Length 93;
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Gaps

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J. Immunol. 150, 5025-5032, 1993
A;Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression
A;Reference number: 148147; MUID:93267104; PMID:8496603
   R;Yoshimura, T.; Takeya, M.; Takahashi, K.
Biochem. Biophys. Res. Commun. 174, 504-509, 1991
A;Title: Molecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its
A;Reference number: JN0128; MUID:91128376; PMID:1704226
   monocyte chemoattractant protein-1 - guinea pig
C;Species: Cavia porcellus (guinea pig)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
   C;Species: Rattus norvegicus (Norway rat)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C;Accession: S07723; JN0128
R;Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J.
Nucleic Acids Res. 18, 23-34, 1990
A;Title: Analysis of the rat JE gene promoter identifies an AP-1 binding sit A;Reference number: S07723; MUID:90174947; PMID:2106664
   25 PDGVN--TPITCCYTENK-QIPLKRVKGYERITSSRCPQEAVIFRILKNKEVCADPTQKWV
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C.Keywords: cytokine; glycoprotein; inflammation
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   A;Cross-references: GDB:138473; OMIM:158106
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   A; Molecule type: mRNA
A; Residues: 1-120 <RES>
   C; Accession: I48147
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   A; Accession: S07723
  Query Match
Best Local Simi
Matches 23;
  RESULT 12
  RESULT 11
   ð
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   Dp
   I.; Van Da
  R;Opdenakker, G., Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.
Blochem. Blophys. Res. Commun. 191, 535-542, 1993
A;Title: Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the cDNA and A;Reference number: JC1478; MUID:93213290; PMID:8461011
A;Accession: JC1478
   C;Accession: JC5295
R;Van Collile, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van Da Buchen. Biophys. Res. Commun. 231, 726-730, 1997
A;Title: Human moncoyte chemotactic protein-2: cDNA cloning and regulated expression of A;Reference number: JC5295; MUID:97224420; PMID:9070881
  A; Experimental source: bone marrow C; Comment: This protein belongs to the beta-chemokine family which is one of the major E tis and in tumor biology, and contribute to the trafficking and recuitment of the respon
  the
   N.; Speleman, F.; Laureys, G.
   A;Cross-references: GB:X72308; GB:S57464; NID:g3928270; PIDN:CAA51055.1; PID:g313708 Rimity, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, Bubnitted to the EMBL Data Library, March 1993 A;Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoattrae A;Reference number: S32222
   A;Cross-references: EMBL:X71087; NID:9288396; PIDN:CAAS0405.1; PID:9288397
C;Comment: This protein induces proteinase secretion and chemotaxis by macrophages and
   A;Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to A;Reference number: A54678; MUID:94375065; PMID:7916328
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   22
  Monocyte chemotactic protein 3 precursor - human NyAlternate names: monocyte chemoattractant protein MCP-3 (5.5 pecies: Homo sapiens (man) (5.5 pecies: Homo sapiens (man) (5.5 pate: 2.8 -Oct-1994 *sequence_revision 28 -Oct-1994 *text_change 16-Jul-1999 (5.7 Accession: A54678; JC1478; S32222 (7.8 Copdenaker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; A;Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assign
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C;Date: 02-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000
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  A; Accession: S32222
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A; Experimental source: glioma cell line U-105MG
A; Experimental source: glioma cell line U-105MG
A; Title: Human monocyte chemoattractant protein-1 (MCP-1).
Adv. Exp. Med. Biol. 305, 47-56, 1991
A; Title: Human monocyte chemoattractant protein-1 (MCP-1).
A; Reference number: 151841; MUID:92095166; PMID:1661560
A; Accession: I51841
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Accession: E13841
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A; Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
B; Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A.
Int. J. Cancer 45, 795-797, 1990
A; Achitle: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotac 1. Access
  N.Alternate names: GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF; MCP-2; N.Contains: glioma-derived chemotactic factor 2 (GDCF-2) (GDCF-2) (GDCF-2) (GDCF-3: Homo sapiens (man)) (GDCF-2) (GDCF-3) (G
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A; Accession: A60299
A; Status: not compared with conceptual translation
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A; Molecule type: mRMA
A; Residues: 1-99 < MONTA
A; Residues: 1-99 < MONTA
A; Ferrutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, T.; Yamada, M.; Larsen, C
Biochem: Biophys. Res. Commun. 159, 249-255, 1989
A; Title: Cloning and sequencing of the CDNA for human monocyte chemotactic and acti.a
A; Accession: A32300; MUID:89165862; PMID:2923622
   A;Cross-references: GB:M24545; NID:g187434; PIDN:AAA18164.1; PID:g307163
R;Roblinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowat, Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989
A;Title: Complete amino acid sequence of a human monocyte chemoattractant, a putati-e
  A;Cross-references: GB:M3719; NID:g187447; PIDN:AAA18102.1; PID:g487124
R;Collins, B.J.; Stler, P.; Ernst, T.; Wong, G.G.
Mol. cell. Biol. 9, 4687-4695, 198
A;Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A;Title: The human homolog of the JE gene encodes a monocyte secretory protein.
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A;Molecule type: mRNA
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A;Cross-references: GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1;
R;Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
R;Yoshimura, T.344, 487-493, 1989
A;Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning
   48 SDCCFSYAT-QIPCKREIYYFPTSGGCIKPGIIFISRRGTQVCADPSDRRVQRCLSTLKQ 106
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  A; Molecule type: mRNA
A; Residues: 1-99 <FUR>
   ò
  g
  R; Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Blochem. Blochya. Res. Commun. 205, 148-153, 1994
A;Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analys
A;Reference number: JC2417; MUID:95091716; PMID:7999015
  R.Orlofsky, A.; Berger, M.S.; Prystowsky, M.B.
Cell Regul. 2, 403-412, 1991
A/Fittle: Novel expression pattern of a new member of the MIP-1 family of cytokine-like A; Reference number: 149555; MUID:91370083; PMID:1832565
A; Accession: 149555; MID:91370083; PMID:1832565
   A; Experimental source: spleen cells A; Note: the authors translated the codon GAA for residue 62 as Lys and GCT for residue
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  12 CCRDYVRYRLPL-RVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKLSQ 69
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C;Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999
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A; Experimental source: corpus luteum
C; Superfamily: macrophage inflammatory protein
E; 1-23/Domain: signal sequence #status predicted <SIG>
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Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
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  Length 116;
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   Score 93.5;
   24.58;
   21; Conservative
  63 ILNKLSO 69
  86 SMKLLDQ 92
   gene C10 protein - mouse
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Matches 21; Conserv
  A; Molecule type: mRNA
A; Residues: 1-99 <HOS>
  C; Date: 02-Jul-1996
C; Accession: I49555
  A; Accession: JC2417
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Query Match

ô g ò g RESULT 14 149555

Query Match

Genetics

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A; Molecule type: protein
A; Molecule type: protein
A; Mesidues: 'X', 25-99 (*Molecule type: Brilliau, A.; Van Damme, J.
Biochem. Biophys. Res. Commun. 167, 904-909, 1990
A; Title: Identification of the monocyte chemotactic protein from human osteosarcoma cell
A; Reference number: A34561; MUID: 90211336; PMID: 2322286
   A; Molecule type: protein
A; Residues: 29-33, 'XX', 36-52;82-92 <DEC>
B; Li, Y.S.; Shy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
Mol. Cell. Biochem. 126, 61-68, 1993
A; Title: The expression of monocyte chemotactic protein (MCP-1) in human vascular endoth
A; Reference number: 157488; MUID:94150478; PMID:8107690
A; Accession: 157488
A; Status: translated from GB/EMBL/DDBJ
  A; Molecule type: mRNA
A; Residues: 1-99 <LIY>
A; Cross-references: GB: S69738; NID: 9545464; PIDN: AAB29926.1; PID: 9545465
R; Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
Chinese J. Microbiol. Immunol. 14, 29-32, 1994
A; Title: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1 (MC
A; Reference number: JC1096
A; Reference number: JC1096
  A)Cross-references: GDB:125279; OMIM:158105
A)Map position: 17q11_2-17q12
C;Superfamily: macrophage inflammatory protein
C;Superfamily: macrophage inflammation: pyroglutamic acid
C;Keywords: cytokine; glycoprotein; inflammation: pyroglutamic acid
F;1-23/Domain: signal sequence #status predicted <SIG>
F;2-4-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>
F;24-99/Product: monocyte chemoattractant protein 1, short form #status experiments
F;24/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experiment
F;37/Binding site: carbohydrate (Asn) (covalent) #status predicted
  2 PYGANMEDSV----CCRDYVRYRLPL-RVVKHFYWTSDSCPRPGVVLLTFRDKEICADP 55
   Gaps
  24.3%; Score 93; DB 2; Length 99; 27.0%; Pred. No. 0.00032; tive 18; Mismatches 30; Indels
A; Reference number: A32396; MUID:89184525; PMID:2648385
   Search completed: July 28, 2003, 04:15:51
Job time : 7.81303 secs
  A; Molecule type: mRNA
A; Residues: 24-28, 'Q', 30-99 <YEQ>
  56 RVPYLKMILNKLSQ 69
   KQKWVQDSMDHLDK 92
  Query Match 24.3%
Best Local Similarity 27.0%
Matches 20; Conservative
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

July 28, 2003, 03:58:03; Search time 3.62395 Seconds (without alignments) 789.709 Million cell updates/sec Run on:

US-09-509-165A-31
382
1 GPYGANMEDSVCCRDYVRYR.....EICADPRVPYLKMILNKLSQ 69 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0°, Gapext 0.5

112892 segs, 41476328 residues Searched:

112892 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt\_40:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| Description                | 000626 homo sapien 088430 mus musculu P5574 h small ind P50229 rattus norv 090826 gallus gall 01663 homo sapien P13501 homo sapien P10855 mus musculu 062401 mus musculu 10882 mus musculu P10851 rattus norv P50231 rattus norv P50230 rattus norv P50330 homo sapien P80919 bos taurus P80098 homo sapien P80444 rattus norv P55773 homo sapien P14844 rattus norv P55773 homo sapien P49873 sus scrofa |
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| SUMMARIES                  | SY22_HUMAN<br>SY22_MOUSE<br>SY33_RAT<br>SY34_CHICK<br>SY35_RAT<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_MOUSE<br>SY36_MOUSE<br>SY36_MOUSE<br>SY36_MOUSE<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RAT<br>SY36_RUMAN<br>SY36_RUMAN<br>SY36_RUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN<br>SY36_HUMAN                                                  |
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| SY06_MOUSE<br>SY02_HUMAN                 | SY02_MACFA<br>SY04_RABIT<br>SY20_MOUSE | SY24_HUMAN<br>SY24_HUMAN<br>SY08_BOVIN                        | MCPA_BOVIN<br>EOTA_HUMAN<br>SY02_CANFA | SY05_PIG |
|                                          |                                        |                                                               |                                        | -        |
| 116                                      | 99<br>92<br>97                         | 148<br>119<br>99                                              | 99<br>97<br>101                        | 20       |
| 24.5                                     | 24.3<br>24.2<br>23.8                   | 23.7<br>23.4<br>23.3                                          | 23.2                                   | 21.9     |
| 93.5                                     | 93<br>92.5<br>91                       | 90.5<br>89.5<br>89                                            | 88.5<br>87.5<br>85                     | 83.5     |
| 34<br>35                                 | 36<br>37<br>38                         | 39<br>41                                                      | 4 4 4<br>2 8 4                         | 4 5      |

## ALIGNMENTS

| RESULT 1<br>SY22_HUM<br>ID SY2<br>AC 0000<br>DT 15-<br>DT 15- | SY22_HUMAN STANDARD; PRT; 93 AA. DD SY22_HUMAN STANDARD; PRT; 93 AA. AC 000626; DT 15-ULL-1999 (Rel. 38, Created) DT 15-ULV-1999 (Rel. 38, Last sequence update) DT 15-UV-2002 (Rel. 41, Last annotation update)                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COCOSNE E                                                     | Small inducible cytokine A22 precursor (CCL22) (Macrophage-derived chemokine) (Stimulated T cell chemotactic protein 1) (CC chemokine STCP-1). SCYA22 OR MDC OR A-152E5.1. Homo sapiens (Human). Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.                                                                                                                                                                               |
| R R R R R R R R R R R R R R R R R R R                         | SEQUENCE FROM N.A., AND SEQUENCE OF 25-35. TISSUE-Macrophage: MEDLINE-97296313: PubMed=9151897; Godiska R., Chantry D., Raport C.J., Sozzani S., Allavena P., Leviten D., Mantovani A., Gray P.W.; "Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes, monocyte-derived dendritic cells, and natural killer cells."  CEXP. Med. 185:1595-1604(1997).                                                                                                                          |
| RA R                      | SEQUENCE FROM N.A. TISSUB-MACTOPhage; MEDLINE-97460118 pubmed-9312138; Chang MS., McNinch J., Elias C. III, Manthey C.L., Grosshans D., Meng T., Boone T., Andrew D.P.; "Molecular cloning and functional characterization of a novel CC chemokine, stimulated T cell chemotactic protein (STCP-1) that specifically acts on activated T lymphocytes."; J. Biol. Chem. 272:25229-25237(1997)                                                                                                                |
| R R R R R R R R R R R R R R R R R R R                         | SEQUENCE FROM N.A. MEDLINE=99425270; PubMed=10493829; MCDLINE=99425270; PubMed=10493829; MCDLINE=99425270; PubMed=10493829; MCDLINE=99425270; PubMed=10.2 Sheddon V.P., Kalush F., Brandon R., Euhrmann J., Mason T., Crosby M.L., Barnstead M., Cronin L., Deslattes Mays A., Cao Y., XN R.X., Kang HL., Mitchell S., Eichler E.E., Harris P.C., Venter J.C., Adams M.D.; "Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q."; Genomics 60:295-308(1999). |
| RP<br>RC<br>RL<br>RP                                          | SEQUENCE FROM N.A. TISSUE-Pancreas, and Spleen; Strausberg R.; Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases. [5] RECEPTOR INTERACTION.                                                                                                                                                                                                                                                                                                                                                           |
| R R R R                                                       | MEDLINE=98104168; PubMed=9430724;<br>Imai T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R.,<br>Yoshie O., Gray P.W.;<br>"Macrophage-derived chemokine is a functional ligand for the CC                                                                                                                                                                                                                                                                                                     |

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| :|:|||
85 KKLLHKLS 92
  61 KMILNKLS 68
                           SEQUENCE FROM N.A.
  92 AA;
   NCBI_TaxID=9606;
   SY18_HUMAN
P55774;
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   DISULFID
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   SY18_HUMAN
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chemokine receptor 4.";

J. Biol. Chem. 273:1764-1768(1998).

J. Biol. Chem. 273:1764-1768(1998).

T. LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED TO LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED TO LYMPHOCYTES TO INFLAMMATORY EDEMORTIC CELLS AND NATURAL KILLER CELLS. MILD CHEMOATTRACTANT FOR PRIMARY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT FOR REMARY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT FOR CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT OF SETTING T LYMPHOCYTES.

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  1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLJFRDKEICADPRVPYL 60
  25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLJFRDKEICADPRVPWV 84
   Gaps
  15-JUL-1999 (Rel. 38, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
(Activated B and dendritic cell-derived).
  Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
   .;
0
  DB 1; Length 93;
  SMALL INDUCIBLE CYTOKINE A22
  Score 374; Db ...
-4 No. 2.1e-40; O. Indels
   631FBE9CC083F787 CRC64;
  InterPro: IPR000827; CC_chemkine_sml.
InterPro: IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSTTE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
CYTOKine; Chemotaxis; Signal.
   Pred. No. 2.1e
2; Mismatches
   BY SIMILARITY BY SIMILARITY
   EMBL, U83239, AAB53372.1; --
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EMBL, BCO27952; AAH27952.1; --
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  93
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  EMBL; U83171; AAB58360.1; -.
   ch 97.9%;
1 Similarity 97.1%;
67; Conservative
   HGNC:10621; SCYA22.
   STANDARD;
  61 KMILNKLSQ 69
  93 AA;
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  1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
   25 GPYGANVEDSICCQDYIRHPLPSRLVKEFFWTSKSCRKPGVVLITVKNRDICADPRQVWV 84
   associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
  01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine Al8 precursor (CCLI8) (Macrophage
inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated
chemokine) (CC chemokine PARC) (Alternative macrophage activation-
   Sideras P.;
Activated murine B lymphocytes and dendritic cells produce a novel
   Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
  ö
TISSUE-Liver;
MEDLINE-9833331; PubMed-9687523;
Schanlel C., Pardall E., Sallusto F., Speletas M., Ruedl C.,
Schanlel C., Pardall E., Sallusto F., Speletas M., Ruedl C.,
Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G.,
   Length 92;
  SMALL INDUCIBLE CYTOKINE A22
   Indels
   39859881CDAE07CA CRC64;
   Inflammatory response.
   6
   PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG
  67.0%; Score 256; DB 1;
61.8%; Pred. No. 1.6e-25;
iive 17; Mismatches 9
  BY SIMILARITY.
BY SIMILARITY.
   SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
  POTENTIAL.
  HSSP; 098157; 1CM9.
MGD; MGI:1306779; Scya22.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemckine_IL8.
   PRT;
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  10302 MW;
  Best Local Similarity 61.8%
Matches 42; Conservative
   STANDARD;
  Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
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RESULT 4
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   Politz O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.,
"The genomic locus for the AMAC-1 gene contains possible pseudo-exons
within the first intron sequence.";
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NAIVE T LYMPHOCYTES
TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES,
HAS CHEMOTACTIC ACTIVITY FOR NAIVE T CELLS, CD4+ AND CD8+ T CELLS
AND THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
IMMUNITY RESPONSES.
  SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.

TISSUB-AORTA, and Lung;

MEDLINE-97376836; PubMed-9233607;

Hieshima K., Imai T., Baba M., Shoudai K., Ishizuka K.,

Hieshima K., Tauruta J., Takeya M., Sakaki Y., Takatsuki K.,

Makagawa T., Tsuruta J., Takeya M., Sakaki Y., Takatsuki K.,

Miura R., Opdenakker G., van Damme J., Yoshie O., Nomiyama H.;

*A novel human CC chemokine PARC that is most homologous to

macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for

T lymphocytes, but not for monocytes.";

J. Immunol. 159:1140-1149(1997).
  MEDLINE-97275308; PubMed-9129202; Wells T.N.C.; Pelisch M.C.; "The chemokine information source: identification and characterization of novel chemokines using the WorldWideWeb and expressed sequence tag
   MEDLINE-99168908; PubMed-10049593;
Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O.,
Hughes A.L., Nomiyama H.;
   -!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,
  Kodelja V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerdt S., "Alternative macrophage activation-associated CC-chemokine-1, a novel structural homologue of macrophage inflammatory protein-1 alpha with
   'A dendritic-cell-derived C-C chemokine that preferentially attracts
   "Genomic organization and biological characterization of the novel human CC chemokine DC-CK-1/PARC/MIP-4/SCYA18."; Genomics 56:296-302(1999).
  Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
   Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H.,
Neote K., McColl S.R.;
  "Chemokine PARC gene (SCYA18) generated by fusion of two
  SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS. TISSUE-Dendritic cell; MEDLINE-97336102; Pubmed-9192897;
                          Li H., Ruben S.; "Macrophage inflammatory protein-3 and -4."; Patent number US5504003, 02-APR-1996.
   SEQUENCE FROM N.A., AND CHARACTERIZATION. MEDLINE-99189237; PubMed-10087196;
   a Th2-associated expression pattern.";
J. Immunol. 160:1411-1418(1998).
  MIP-1alpha/LD78alpha-like genes.";
Genomics 55:353-357(1999).
   Leukoc. Biol. 61:545-550(1997).
   MEDLINE-98230488; PubMed-9570561;
   naive T cells.";
Nature 387:713-717(1997).
  DISCUSSION OF SEQUENCE.
[1]
SEQUENCE FROM N.A.
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   SEQUENCE FROM N.A.
  databases.
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  63
   24 GTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKRGRQICADPNKKWVQKY 81
BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS
                AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES
DERIVED FROM PERTPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY
PERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE
DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION.
INDUCTION: SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND
IL-10. EXPRESSION IS INHIBITED BY IFN-GAMMA WHILE GLUCCOCPTICOIDS
EXERT A SLIGHTLY POSITIVE SYNERGISTIC EFFECT IN COMBINATION WITH
IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING
MONOCYTIC U937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
   4 GANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMI
  01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2020 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha).
  Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
   ;
;
   34.8%; Score 133; DB 1; Length 89; 37.5%; Pred. No. 5.3e-10; tive 16; Mismatches 22; Indels
   SMALL INDUCIBLE CYTOKINE A18.
  BY SIMILARITY.
BY SIMILARITY.
C287B94B9C0518E4 CRC64;
   Inflammatory response; Signal.
   92 AA.
   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
  InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
   EMBL; K13710; CAA74039.1; -. EMBL; AB012113; BAA34368.1; -. EMBL; AF082214; AAC32287.1; -. EMBL; AF082212; AAC32287.1; JOINED. EMBL; AF082213; AAC32287.1; JOINED.
   PRT;
  EMBL; AB000221; BAA21670.1; -.
   EMBL; AF111198; AAD30390.1;
HSSP; P13236; 1HUM.
  9849 MW;
   Genew; HGNC:10616; SCYA18
   Best_Local Similarity 37.5
Matches 24; Conservative
   STRAIN=CD-1; TISSUE=Lung;
   STANDARD;
  Pfam; PF00048; IL8; 1.
   Cytokine; Chemotaxis;
  89 AA;
   [1]
SEQUENCE FROM N.A.
   NCBI_TaxID=10116;
  :: |
82 ISDL 85
   64 LNKL 67
  MIM; 603757; -
PLACENTA,
   DISULFID
  Query Match
  DISULFID
   SEQUENCE
   SY03_RAT
   SIGNAL
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CONFLICT
  DISULFID
   Query Match
   DISULFID
  SIGNAL
   CHAIN
   Matches
  RESULT
                             ò
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   61
  82
   MEDIARE-96183056; PubMed-8607872;
Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
Nakagawa H., Shiota S., Takano K., Shibata F., Kato H.;
"Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel member of rat GRO/CINCS, is a predominant chemokine produced by lipopolysaccharide-stimulated rat macrophages in culture.";
Blochem. Blophys. Res. Commun. 220:945-948(1996).
--- FUNCTION: MOMOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
HAS CHEMOTACTIC ACTIVITY FOR MONOCITES, NEUTROPHILS, EOSINOPHILS, BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG INF-ALPHA PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
   25 PYGAD-TPTACCFSYGR-QIPRKFIADYFETSSLCSQPGVIFLTKRNRQICADPKETWVQ
  Pfam; PF00048; ILB; 1.
SWART; SW00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYtokine; Chemotaxis; Inflammatory response; Signal; Heparin-binding.
   INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
  2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
  Gaps
          Shi M.M., Godleski J.J., Paulauskis J.D.;
"Molecular cloning and posttranscriptional regulation of macrophage
inflammatory protein-1 alpha in alveolar macrophages.";
Blochem. Biophys. Res. Commun. 211:289-295(1995).
  MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
   STRAIN=Long Evans; TISSUE-Lung; MEDLINE=95238980; PubMed=7722328; Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.; RNole of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in acute lung injury in rats."; J. Immunol. 154:4793-4802(1995).
  5
   DB 1; Length 92;
  21; Indels
   SMALL INDUCIBLE CYTOKINE A3.
BY SIMILARITY.
BY SIMILARITY.
   A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
14E861C647F9A2EB CRC64;
   24; Conservative ' 19; Mismatches
   Score 129;
  Pred. No.
  InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
  SUBCELLULAR LOCATION: Secreted
 MEDLINE=95298037; PubMed=7779098;
  ΒX
   92
57
73
6
6
57
10335 MW;
   33.8%;
36.4%;
  EMBL; U22414; AAA80608.1; -
  EMBL; U06435; AAA96498.1;
HSSP; P13236; 1HUM.
   C-C) (CHEMOKINE CC)
   88
  SEQUENCE FROM N.A.
  SEQUENCE OF 24-57.
   Similarity
   62 MILNKL 67
  92 AA;
   BINDS HEPARIN
   EXITEL
  34
35
35
57
   CHAIN
DISULFID
   DISULFID
CONFLICT
CONFLICT
SEQUENCE
   83
   Query Match
  Local
   SIGNAL
   Matches
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  ï
  61
   81
SY04_CHICK STANDARD; PRT; 90 AA.
090826; 0910C9;
01-NOV-1997 (Rel. 35, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A4 homolog precursor (Macrophage Inflammatory
   -1- SUBUNIT: HOMODIMER (BY SIMILARITY).
-1- SUBCELLULAR LOCATION: Secreted.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
  chemokine homologous to
  2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
  SEQUENCE FROM N.A.
Hughes S.M., Bumstead N.;
"Wapping of the gene encoding the chicken homologue of the mammalian chemokine SCYA4.";
Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
  Petrenko O., Enrietto P.J.;
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION; MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
  Gaps
  BY SIMILARITY.
SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
  ï
  DB 1; Length 90;
  Indels
   M -> L (IN REF. 1).
50AF9679A267408F CRC64;
  Petrenko O., Ischenko I., Enrietto P.J.;
"Isolation of a cDNA encoding a novel chicken chemol
mammalian macrophage inflammatcry protein-1 beta.";
Gene 160:305-306(1995).
   ; Score 125.5; DB 1
; Pred. No. 4.7e-09;
16; Mismatches 26
   BY SIMILARITY
BY SIMILARITY
  Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Signal.
  EMBL; AJ243034; CAB45103.1; --
HSSP; P12325; 1HUM.
InterPro; IPR000827; CC_Chemkine_Sml.
InterPro; IPR001811; Chemokine_IL8.
   SEQUENCE FROM N.A.
TISSUE-Bone marrow;
MEDLINE-95369710; Pubmed-7642115;
  32.98;
  9987 MW;
   34.8%;
   SEQUENCE OF 14-90 FROM N.A.
  EMBL; L34553; AAA48747.1;
  Conservative
  C-C) (CHEMOKINE CC).
   Gallus gallus (Chicken).
   protein 1-beta homolog)
   (BY SIMILARITY)
  Local Similarity
nes 23; Conserv
  62 MILNKL 67
  90 AA;
  NCBI_TaxID=9031;
  23
  g
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MEDLINE-98226667; PubMed-9558365;
  PROSITE;
  DISULFID
   Query Match
  between
   DISULFID
   DISULFID
   CONFLICT
  SEQUENCE
   Best Local
  VARIANT
   SIGNAL
  RESULT 7
SY05_HUMAN
   CHAIN
   SCYA5
  Matches
AC OC OC OC OC OC
   δλ
   pp
  SID_HUMAIN
016663; Q9UM74;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41). Last annotation update)
15-JUN-2002 (Rel. 41). Last annotation update)
Small inducible cytokine Al5 precursor (CCLL5) (Macrophage
1nflammatory protein 5) (MIP-5) (Chemokine CC-2) (HCC-2) (NCC-3) (MIP-
1 delta) (Leukotactin-1) (LKN-1) (Mrp-2b).
  SEQUENCE FROM N.A.
MEDLINE-99228475; Pubmed=10213461;
MEDLINE-9228475; Pubmed=10213461;
MONDIVAM H., FUKUda S., IIO M., Tanase S., Miura R., Yoshie O.;
"Organization of the chemokine gene cluster on human chromosome 17011.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and
  SEQUENCE FROM N.A.

Kwon B.S., Youn B.S.,

"Isolation and characterization of a human chemokine cDNA, hmrp-2b.";

Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.
   SEQUENCE FROM N.A.

MEDLINE-98208236; Pubmed-9548457;
Youn B.-S., Zhang S.M., Lee E.K., Park D.H., Broxmeyer H.E.,
Murphy P.M., Locati M., Pease J.E., Kim K.K., Antol K., Kwon B.S.,
"Molecular cloning of leukotactin-1: a novel human beta-chemokine,
"molecular cloning of leukotactin-1: a novel human beta-chemokine,
potent agonist at Cc chemokine receptors 1 and 1ymphocytes, and a
J. Immunol. 159:5201-5205(1997).
  Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
"HCC-2, a human chemokine: gene structure, expression pattern, and
  MEDIINE-99287677; PubMed-9624581; Wang W., Bacon K.B., Oldham E.R., Schall T.J.; Mang W., Bacon K.B., Oldham E.R., Schall T.J.; Mang W., Bacon K.B., Oldham E.R., Schall T.J.; Grant cloning and functional characterization of human MIP-1 delta, a new C- chemokine related to mouse CCF-18 and C10."; J. Clin. Immunol. 18:214-222(1998).
   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
  SEQUENCE OF 12-113 FROM N.A.

Coulin F., Power C.A., Alouani S., Peitsch M.C., Schroeder J.-M.
Moshizuki M., Clark-Lewis I., Wells T.N.C.;
Submitted (JAN-1997) to the SWISS-PROT data bank.
  MEDINE-97275308; Pubmed-9129202; Wells T.N.C., Peitsch M.C.; "The chemokine information source: identification and characterization of novel chemokines using the WorldWideWeb and
   biological activity.";
Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
  Interferon Cytokine Res. 19:227-234(1999).
   113 AA
   SEQUENCE FROM N.A., AND CHARACTERIZATION,
   expressed sequence tag databases.";
J. Leukoc. Biol. 61:545-550(1997).
  TISSUE=Liver;
MEDLINE=98263352; PubMed=9600961;
   STANDARD;
  DISCUSSION OF SEQUENCE.
  [8]
TISSUE SPECIFICITY
           82 DYMNKM 87
  SEQUENCE FROM N.A.
   NCBI_TaxID=9606;
   rissum=Spleen;
  RANTES
  SY15_HUMAN
  RESULT 6
           셤
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  ö
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   the European Bioinformatics Institute. There are no restrictions on use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and for commer
   spliced
   -1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
   -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS T CELLS AND MONOCYTES, BUT NOT NEUTROPHILS, EOSINOPHILS, OR B CELLS. ACTS MAINLY VIA CC CHEMOKINE RECEPTOR CCR1. ALSO BINDS TO CCR3.
  Gaps
   SYOS_HUMAN STANDARD; PRT; 91 AA.
P13501; 043646; Q9NYA2;
01-JAN-1990 (Rel. 13, Created)
15-JUL-1999 (Rel. 34, Last sequence update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta) (T cell-specific protein P228).
   12 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKL 67
   -:- SUBCELLULAR LOCATION: Secreted --:- TISSUE SPECIFICITY: MOST ABUNDANT IN HEART, SKELETAL MUSCLE AND -:- ADRENAL GLAND. LOWER LEVELS IN PLACENTA, LIVER, PANCREAS AND BONE MARROW
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Youn B.-S., Zhang S.W., Broxmeyer H.E., Cooper S., Antol K., Fraser M. Jr., Kwon B.S.; Choketa8 and Cooper alternatively sp. Characterization of Crabeta8 and Cooper S. two alternatively sp. forms of human beta-chemokine, chemoattractants for neutrophils, monocytes, and lymphocytes, and potent agonists at CC chemokine
  ö
   PS00472; SWALL_CYTOKINES_CC; 1.
Chemotaxis; Heparin-binding; Signal; Polymorphism.
  31.7%; Score 121; DB 1; Length 113; 33.9%; Pred. No. 2.2e-08;
  SMALL INDUCIBLE CYTOKINE A15.
   I -> T.
/FTId=VAR_011640.
V -> I (IN REF. 5).
0BA0FCE7B8A30A04 CRC64;
  15; Mismatches
  InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
  EMBL; 270293; CAA94308.1; -. EMBL; 270293; CAA94306.1; -. EMBL; AF031587; AA894617.1; -. EMBL; AF088219; AAC63328.1; -.
  14 V
12248 MW;
   EMBL; U58914; AAD10847.1; -. HSSP; P55773; 1G91.
   Genew; HGNC:10613; SCYA15.
   receptor 1.";
Blood 91:3118-3126(1998).
   Conservative
   1113
77
93
104
24
  PF00048; IL8; 1.
SM00199; SCY; 1
  Homo sapiens (Human).
   113 AA;
  Similarity
   NCBI_TaxID=9606;
   Pfam; PF00048
  MIM; 601393;
  19;
   Cytokine;
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TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.

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  g
  "The crystal structure of Met-Rantes: comparison with native Rantes and AOP-Rantes.";
Protein Pept. Lett. 7:73-82(2000).
-1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES EOSINOPHILS. BINDS TO CCR1, CCR3, CCR4 AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CB8+ T CELLS. RECOMBINANT RANTES PROTEIN INDUCES A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRINS OF HIV-1, HIV-2, AND SIMIAN IMMUNDEFICIENCY VIRUS (SIV).
                                      Schall T.J., Jongskra J., Dyer B.J., Jorgensen J., Clayberger C., Davis M.M., Krensky A.M.;

"A human T cell-specific molecule is a member of a new gene family.";

J. Immunol. 141:1018-1025(1988).
  MEDLINE-99228475; PubMed-10213461;
Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.;
"Organization of the chemokine gene cluster on human chromosome
17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and
   "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."; Science 270:1811-1815(1995).
   Hoover D.M., Shaw J., Gryczynski Z., Proudfoot A.E.I., Wells T.N.C.,
Lubkowski J.;
  SYNTHESIS, AND X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
MIDLINES-99111238; PubMed-9889151;
Wilken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H.,
Picard L., Wlodawer A., Lubkowski J., Kent S.B.;
Trotal chemical synthesis and high-resolution crystal structure of
the potent and IIIV protein AOP-RANTES.";
Chem. Biol. 6:43-51(1999).
  Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
   SEQUENCE FROM N.A.
Zeng Q.P., Yang R.Y., Fu L.C.;
"The complete sequence of human beta-chemokine RANTES mRNA.";
Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
  Skelton N.J., Aspiras F., Ogez J., Schall T.J.;
Proton MR assignments and solution conformation of RANTES,
Chancking of the C-C type ".
  Strausberg R.; Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
  STRUCTURE BY NMR.
MEDLINE-55352612; PubMed-7542919;
Chung C.-W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C.;
"The three-dimensional solution structure of RANTES.";
Blochemistry 34:9307-9314(1995).
   Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
  [6]
SEQUENCE OF 49-56; 71-79 AND 83-91, AND FUNCTION.
MEDLINE-96106406; PubMed-8525373;
  . Interferon Cytokine Res. 19:227-234(1999).
   X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
   MEDLINE-95244456; PubMed-7537088;
                            MEDLINE-88285659; PubMed-2456327;
   chemokine of the C-C type.";
Biochemistry 34:5329-5342(1995).
[1]
SEQUENCE FROM N.A.
  [5]
SEQUENCE FROM N.A.
   [3]
SEQUENCE FROM N.A.
   [2]
SEQUENCE FROM N.A.
  STRUCTURE BY NMR.
  TISSUE-Brain;
   RANTES
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SUBCELLULAR LOCATION: Secreted.

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   ï
   61
   25 PYSS--DITPCCFAYIARPLPRAHIKEYFYTSGKCSNPAVVFUTRKNRQVCANPEKKWVR 82
-!- INDUCTION: BY MITOGENS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
   SYO3_MOUSE STANDARD; PRT; 92 AA.
P10855; P14096;
01-JUL-1989 (Rel. 11, Created)
01-JUL-1989 (Rel. 14, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (TY-5) (SIS-alpha) (Heparin-binding chemotaxis protein) (L2G25B).
SCYA3 OR MIP1A.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
   2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
   Gaps
  MEDLINE-88258380; PubMed-3290382;
Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermsen K., Luedke C.,
   ;
  SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response;
  Length 91;
   25; Indels
  SMALL INDUCIBLE CYTOKINE AS
  A -> R (IN REF. 1 AND 4).
A -> V (IN REF. 4).
FBOBFAF9A87C62OF CRC64;
   Score 119; DB 1;
; Pred. No. 3.2e-08;
19; Mismatches 25
  InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
  AF043341; AAC03541.1; -. AF088219; AAC63331.1; -. AF266753; AAF73070.1; -. BC008600; AAH08600.1; -.
   EMBL; M21121; AAA36725.1; -.
   9990 MW;
   31.2%;
  30.3%;
   PDB; 1HRJ; 14-OCT-96.
PDB; 1RTN; 03-JUN-95.
PDB; 1RTO; 03-JUN-95.
PDB; 1B3A; 23-APR-99.
PDB; 1EQT; 19-APR-00.
Genew; HGNC:10632; SCYA5.
MIM; 187011;
  20; Conservative
  Pfam; PF00048; IL8; 1.
   23
91
57
   PIR; A28815; A28815
   Query Match
Best Local Similarity
Matches 20; Conserv
   62 MILNKL 67
  83 EYINSL 88
   SEQUENCE FROM N.A.
   91 AA;
   NCBI_TaxID=10090;
  3D-structure.
  CONFLICT
  DISULFID
   SEQUENCE
  DISULFID
   SIGNAL
  CHAIN
   SY03_MOUSE
  EMBL;
   EMBL;
```

AF065939; AAC17506.1; AF065940; AAC17507.1; AF065941; AAC17508.1; AF065942; AAC17509.1; AF065943; AAC17509.1;

A32393; A32393.

P13236; 1HUM

X12531; CAA31047.1; -. X53372; CAA37452.1; -. J04491; AAA40304.1; -. M73061; AAA39707.1; -.

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PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Inflammatory response; Signal.
  MGD; MGI:98260; SCya3.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
  SMART; SM00199; SCY; 1.
  InterPro; IPR001811; Cl
Pfam; PF00048; IL8; 1.
   PIR; A32393; A32393.
PIR; S04533; S04533.
PIR; S11685; S11685.
   CONFLICT
CONFLICT
SEQUENCE
  DISULFID
DISULFID
   SIGNAL
  EMBL;
EMBL;
  EMBL;
EMBL;
   HSSP;
   EMBL;
   CHAIN
   EMBL;
          q
  δ
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  SUBCELLULAR LOCATION: Secreted.
ISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
   Wolpe S.D., Davatelis G., Sherry B., Beutler B., Hesse D.G.,
Nguyen H.T., Moldawer L.L., Nathan C.F., Lowry S.F., Cermi A.;
"Macrophages secrete a novel heparin-binding protein with
inflammatory and neutrophil chemokinetic properties.";
J. Exp. Med. 167:570-581(1988).
-!- FUNCTION: MONGKINE WITH INFLAMMATORY, PYROGENIC AND CHEMOKINETIC
- PROPERTIES. HAS A POPERT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
  alpha
  Grove M., Lowe S., Graham G., Pragnell I., Plumb M.; "Sequence of the murine haemopoletic stem cell inhibitor/macrophage inflammatory protein 1 alpha gene."; and armatory protein 1 alpha gene."; Nucleic Acids Res. 18:5561-5561(1990).
  SEQUENCE FROM N.A.
STRAIN-BALB/CJ, DBA/2J, NOD/LTJ, SJL/J, and B10.S/J; TISSUE-Spleen;
Ma R.Z., Teuscher C.;
Gallegos C., Coit D., Merryweather J., Cerami A.; "Cloning and characterization of a cDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties."; J. Exp. Med. 167:1939-1944(1988).
  :
   "Genomic structure of murine macrophage inflammatory protein-1 and conservation of potential regulatory sequences with a human homolog, LD78.";
  Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermsen K., Luedke Gallegos C., Coit D., Merryweather J., Cerami A.;
J. Exp. Med. 170:2189-2189(1989).
   SEQUENCE FROM N.A.
MEDLINE-91237116; Pubmed-2033269;
Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
   Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
"A family of small inducible proteins secreted by leukocytes members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
J. Immunol. 142:679-687(1989).
   Ma R.Z., Teuscher C.;
Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
  Kwon B.S., Weissman S.M.;
"CDNA sequences of two inducible T-cell genes.";
Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
  SEQUENCE FROM N.A.
MEDLINE=89184547; Pubmed=2784565;
   SEQUENCE OF 24-42.
MEDLINE-88154745; PubMed-3279154;
   MEDLINE-89093958; PubMed-2521353;
  STRAIN-DBA/2J;
MEDLINE-91016858; PubMed-2216738;
  J. Immunol. 146:4031-4040(1991).
  SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
  NEUTROPHILS.
  Cerami A.;
  REVISIONS
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CYTOKINE A3.

SMALL INDUCIBLE C BY SIMILARITY. BY SIMILARITY.

23 92 57 73 22 62 10345 MW;

92 AA;

F -> L (IN REF. 3). V -> A (IN REF. 3). 8BFF2DE7C6DEDD38 CRC64;

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61
  82
   MEDLINE-97149438; PubMed-8996246;
Sarafi M.N., Garcia-Zepeda B.A., McLean J.A., Charo I.F., Luster A.D.;
"Murine monocyte chemoattractant protein (MCP)-5: a novel CC
chemokine that is a structural and functional homologue of human
  2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
   (Monocyte chemotactic
  Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
  MEDLINE=97079149; PubMed=8920881; Jia G.-Q., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A. Wershil B.K., Gutierrez-Ramos J.C.; Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation."; J. Exp. Med. 184:1939-1951(1996).
   5;
31.2%; Score 119; DB 1; Length 92; 34.8%; Pred. No. 3.2e-08; tive 18; Mismatches 23; Indels
   SY12_MOUSE STANDARD; PRT; 104 AA. 062401; 090YD6; 01-NOV-1997 (Rel. 35, Created) 01-NOV-1997 (Rel. 35, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) small inducible cytokine Al2 precursor (CCL12) protein 5) (MCP-5) (MCP-1 related chemokine).
                     Best Local Similarity 34.8
Matches 23; Conservative
  83 EYITDL 88
   62 MILNKL 67
  SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
   NCBI_TaxID-10090;
   Query Match
   SY12_MOUSE
   RESULT 9
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Exp. Med. 185:99-109(1997)

EMBL; M23447; AAA40146.1; -.

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musculus (Mouse)
  EMBL;
    TEMILITARY TO MONOPHASIC

TEMILITARY TO MONOPHASIC

TEMILITARY TO MONOPHASIC

TEMILITARY TO MONOPHASIC

TEMILITARY TO MONOPHASIC

TEMILITARY TO MONOPHASIC

AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTES,

AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTES,

AND LYMPHATION AND THE HOST RESPONSE TO PATHOCENS AND MAY PLAY A

PLOYTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.

TO SUBGUIT: HOMODIMER (BY SIMILARITY).

TO SUBGUITS HOROTHY SECRETARY

THISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND

THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,

BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.

THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,

BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.

THYMUS. BELOMGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C.C.).
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   12 CCRDYVRYRLPLRVVKHF-YWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKLSQ 69
  Blankenhorn E.P.; "Sequence polymorphisms in the chemokines Scyal (TCA-3), Scya2 (monocyte chemoattractant protein (MCP)-1), and Scyal2 (MCP-5) are candidates for eae7, a locus controlling susceptibility to monophasic
   Gaps
   01-JUL-1993 (Rel. 26, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta) (MuRantes).
[3]
SEQUENCE FROM N.A.
STRAIN-B10.S/J, BALB/C, DBA/2J, NOD/LTJ, and SJL/J; TISSUE-Spleen;
MEDLINE-99370037; PubMed-10438970;
  Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W.,
  QTFILEPSCLG -> RT (IN STRAIN SJL/J).
  30.8%; Score 117.5; DB 1; Length 104; 39.0%; Pred. No. 5.6e-08;
   SMALL INDUCIBLE CYTOKINE A12.
   22; Indels
  8D102F4FF4CC3DBF CRC64;
   SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; Signal; Inflammatory response.
   BY SIMILARITY.
BY SIMILARITY.
  91 AA
   13; Mismatches
   BY SIMILARITY
  MGD; MGT.108224; SCyal2.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
  EMBL, AF065934; AAF15384.1; -.
EMBL, AF065935; AAF15385.1; -.
EMBL, AF065936; AAF15386.1; -.
EMBL, AF065937; AAF15387.1; -.
EMBL, AF065938; AAF15389.1; -.
HSSP; P13500; 1DOL.
  11659 MW;
  EMBL; U50712; AAB50053.1; -. EMBL; U66670; AAB49424.1; -.
  Conservative
   STANDARD;
   Pfam; PF00048; IL8; 1.
  104 AA;
  Local Similarity
nes 23; Conserv
  SY05_MOUSE
P30882;
   DISULFID
  SEQUENCE
   DISULFID
   Query Match
   SIGNAL
   Best Loc
Matches
   SY05_MOUSE
  RESULT 10
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   SEQUENCE FROM N.A.
STRAIN=BALB/CJ.B10.S/J, NOD/LTJ, and SJL/J; TISSUE-Spleen;
STRAIN=BALB/CJ.B10.S/J, NOD/LTJ, and SJL/J; TISSUE-Spleen;
MAR N.Z., Teuscher C.;
Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
-I-FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND BOSINOPHILS. CAUSES THE ELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS.
-I-SUBCELLULAR LOCATION: Secreted.
-I-TISSUE SPECIFICITY: T-CELL AND MACROPHAGE SPECIFIC.
-I-SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
   "Isolation and characterization of cDNA from renal tubular epithelium
   STRAIN-NIH Swiss;
MEDLINE-94132613; Pubmed-7507961;
Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Nellson E.G.;
"Cloning, genomic organization, and chromosomal localization of the Scya5 gene encoding the murine chemokine RANTES.";
J. Immunol. 152:1182-1189(1994).
   Craniata; Vertebrata; Euteleoscomii;
Sciurognathi; Muridae; Murinae; Mus.
  "Definition of a lipopolysaccharide-responsive element in the 5'-flanking regions of MuRantes and crg-2.";
Mol. Cell. Biol. 14:2914-2925(1994).
  MEDIINE-92289805; PubMed-1376260; Schall T.J., Simpson N.J., Mak J.Y.; "Molecular cloning and expression of the murine RANTES cytokine: structural and functional conservation between mouse and man."; Eur. J. Immunol. 22:1477-1481(1992).
  Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N., Paznekas W.A.,
  Heeger P., Wolf G., Meyers C., Sun M.J., O'Farrell S.C.,
Krensky A.M., Nellson E.G.;
   SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC;
  HSSP; P13501; IRTN.
MGD; MGI:98262; Scya5.
InterPro; IPR000827; CC_chemkine_sml
InterPro; IPR001811; Chemokine_IL8.
  STRAIN=BALB/C;
MEDLINE-94217689; PubMed-7513046;
  SEQUENCE FROM N.A.
MEDLINE-92277990; Pubmed-1375672;
   EMBL, AF065944, AAC17511.1; --.
EMBL, AF065945, AAC17512.1; --.
EMBL, AF065946, AAC17513.1; --.
EMBL, AF065947, AAC17513.1: --.
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
   Kidney Int. 41:220-225(1992).
  EMBL; M77747; AAA40029.1; -.
   $37648; AAB22330.1; -. 002298; AAA18302.1; -. X70675; CAA50011.1; -.
  encoding murine Rantes."
  Pfam; PF00048; IL8; 1.
  SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
  NCBI_TaxID-10090;
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MEDLINE-96127782; PubMed-8541527;
  Cytokine;
   DISULFID
  SEQUENCE
   DISULFID
   MUTAGEN
  Genew;
  SIGNAL
   RESULT 12
      NAMES OF THE PROPERTY OF THE P
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  1;
   25 PYGS--DITPCCFAYLSLALPRAHVKEYFYTSSKCSNLAVVFVTRRNRQVCANPEKKWVQ 82
   2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
  01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (Tonsillar lymphocyte LD78 alpha protein) (G/G1 switch regulatory protein 19-1) (G0S19-1 protein)
(SIS-beta) (PAT 464.1).
SCYA3 OR G0S19-1 OR MIP1A.
  SEQUENCE FROM N.A.
MEDLINE-91103879; PubMed-2271120;
Blum S., Forsdyke R.E., Forsdyke D.R.;
"Three human homologs of a murine gene encoding an inhibitor of stem
  Gaps
  Zipfel P.F., Balke J., Irving S.G., Kelly K., Siebenlist U.;
"Mitogenic activation of human T cells induces two closely related
genes which share structural similarities with a new family of
   Chordata, Craniata, Vertebrata, Euteleostomi, Primates, Catarrhini, Hominidae, Homo.
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  SEQUENCE FROM N.A.
MEDLINE-86223879; PubMed-3086300;
Obaru K., Fukuda M., Maeda S., Shimada K.;
"A cDNA clone used to study mRNA inducible in human tonsillar Lymphocytes by a tumor promoter.";
J. Biochem. 99:885-894(1986).
  SEQUENCE FROM N.A.
MEDLINE-90287155; PubMed-1694014;
Nakao M., Nomlyama H., Shimada K.;
"Structures of human genes coding for cytokine LD78 and their
Signal; Inflammatory response.
  Length 91;
                                SMALL INDUCIBLE CYTOKINE A5.
BY SIMILARITY.
BY SIMILARITY.
  25; Indels
  Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases
   T -> A (IN REF. 2).
A -> E (IN REF. 1).
5DFD66F4684FE1C8 CRC64;
  Score 117; DB 1;
Pred. No. 5.7e-08;
7; Mismatches 25;
   SEQUENCE OF 24-92, AND MUTAGENESIS OF ASP-49
  92 AA.
                        POTENTIAL.
   . Cell. Biol. 10:3646-3658(1990).
  MEDLINE-89140347; PubMed-2521882;
   Immunol. 142:1582-1590(1989).
  17;
   DNA Cell Biol. 9:589-602(1990).
   Homo sapiens (Human).
Eukaryota, Merazoa, Chordata,
Mammalia, Eutheria, Primates;
NCBI_TaxID=9606;
    T-cell;
   10071 MW;
  30.6%;
  SEQUENCE OF 23-92 FROM N.A.
  Conservative
  STANDARD;
                      23
91
73
19
    Chemotaxis;
   cell proliferation
  Similarity
   EYINYL 88
   secreted factors."
  62 MILNKL 67
  SEQUENCE FROM N.A.
   91 AA;
  22;
  SY03_HUMAN
   expression
  Cytokine;
SIGNAL
  DISULFID
   CONFLICT
   SEQUENCE
  Query Match
Best Local
   RESULT 11
SY03_HUMAN
  P10147
  CHAIN
  Matches
    WITITE SO
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Hunter M.G., Bawden L., Brotherton D., Craig S., Cribbes S., Czaplewski L.G., Dexter T.M., Drummond A.H., Gearing A.H., Heyworth C.M., Lord B.I., Mccourt M., Varley P.G., Wood L.M., Edwards R.M., Lewis P.J.; Behards R.M., Lewis P.J.; I alpha with improved pharmaceutical properties.";
   LUSSO P.;

"Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major
HIV-suppressive factors produced by CD8+ T cells.";
Science 270:1811-1815(1995).

-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
BINDS TO CORL, CREA, CORE, ONE OF THE MAJOR HIV-SUPPRESSIVE
FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-ALPHA INDUCES
A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2,
AND SIMLAN IMMUNODEFICIENCY VIRUS (SIV).

-!- SUBCELLULAR LOCATION: Secreted.
-!- INDUCTION: BY TAPA OR PHA (TPA = 12-0-TETRADECANOYL PHORBOL-13
ACCEATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
  10 SVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKL 67
   SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
  Gaps
   ö
  Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
  30.6%; Score 117; DB 1; Length 92; 31.0%; Pred. No. 5.7e-08; ive 16; Mismatches 24; Indels
  BY SIMILARITY.

BY SIMILARITY.

D->A: IN BB-10010; IMPROVED PHARMACEUTICAL PROPERTIES.

517865D506776CA8 CRC64;
   CYTOKINE A3
  Inflammatory response; Signal.
   SMALL INDUCIBLE
   C-C) (CHEMOKINE CC). STRONG, TO SCYA3L1.
   SEQUENCE OF 27-40 AND 71-83, AND FUNCTION. MEDLINE=96106406; Pubmed=8525373;
   SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
  InterPro; IPR000827; CC_chemkine_sml
InterPro; IPR001811; Chemokine_IL8.
   EMBL; D00044; BAA00029.1; --
EMBL; M2452; AAA3316.1; --
EMBL; M2315; AAA57255.1; --
EMBL; X03754; CAA27388.1; --
EMBL; X04018; CAA27643.1; ALT_SEQ.
EMBL; M23178; AAA3588.8.1; --
EMBL; M2444; BAA14172.1; --
  92 AA; 10085 MW;
   EMBL; AF043339; AAC03539.1;
   Conservative
  HGNC:10627; SCYA3.
   23
92
73
73
   Pfam; PF00048; IL8; 1.
  Chemotaxis;
   PIR; A24198; A24198.
PIR; A30574; A30574.
HSSP; P13236; 1HUM.
   Query Match
Best Local Similarity
Matches 18; Conserv
   MITOGEN))
  MIM; 182283;
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  2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK 61
  25 PIGSDPPTS-CCFSYTSRKIHRNFVMDYYETSSLCSQPAVVFLTKKGRQICADPSEPWVN 83
   STANDARD; PRT; 93 AA.

STANDARD; Created)
01-NOV-1997 (Rel. 35, Last sequence update)
11-NOV-1997 (Rel. 41, Last annotation.update)
Small inducible cytokine Al4 precursor (CCL14) (Chemokine CC-1/CC-3)
SCXA14 OR NCC2.
  Schulz-Knappe P., Maegert H.-J., Dewald B., Meyer M., Cetin Y., Kubbies M., Tomeczkowski J., Kirchhoff K., Raida M., Adermann K., Kith A., Reinecke M., Sillard R., Pardigol A., Uguccioni M., Baggiolini M., Forsmann W.-G., "HCC-1, a novel chemokine from human plasma."; J. Exp. Med. 183:295-299(1996).

SEQUENCE FROM N.A.
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
   DB 1; Length 92;
   SMALL INDUCIBLE CYTOKINE A4.
BY SIMILARITY.
608451EEEEC7103D CRC64;
   Indels
   InterPro; letuvioii, English From Promote Fram; Promote Fram; Promote From From From From From Frame From Frame From Frame From Frame Fram
   ; Pred. No. 6.6e-08; 12; Mismatches 29
  30.5%; Score 116.5;
   SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.
  InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
   TISSUE-Bone marrow;
MEDLINE-96136773; PubMed-8551235;
  10234 MW;
  36.48;
  EMBL; U06434; AAA96497.1;
HSSP; P13236; 1HUM.
   Best Local Similarity 36.4 Matches 24; Conservative
   Homo sapiens (Human).
   62 MILNKL 67
  :| |
84 EYVNDL 89
  92 AA;
  NCBI_TaxID-10116;
   NCBI_TaxID=9606;
  DISULFID
SEQUENCE
  DISULFID
   Query Match
    ò
  q
   δ
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  2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK 61
   26 PYGS--DITPCCFAYLSLALPRAHVKEYFYISSKCSNLAVVFYTRRNRQVCANPEKKWVQ 83
  STRAIN-LONG EVANS; TISSUE-LUNG;
Jones M.L., Shanley T.P., Ward P.A.;
Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.

-!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOXTES, MEMORY T HELPER
CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).

-!- SUBCELUILAR LOCATION: Secreted.

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
   01-027-1996 (Rel. 34, Last sequence update)
01-027-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inductble cytokine A4 precursor (CCL4) (Macrophage inflammatory
protein 1-beta) (MIP-1-beta).
  Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
   Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
  Gaps
   01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytckine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta).
  ;
   InterPro; IPR000827; cc_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
PR00187; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYTOKINE; Chemotaxis; T-cell; Signal; Inflammatory response.
   30.6%; Score 117; DB 1; Length 92; 33.3%; Pred. No. 5.7e-08;
  25; Indels
  POTÉNTIAL.
SMALL INDUCIBLE CYTOKINE A5.
BY SIMILARITY.
BY SIMILARITY.
   B4FBEC2B4208ABC6 CRC64;
                      92 AA.
   92 AA.
   17; Mismatches
  92 AA; 10170 MW;
  EMBL; U06436; AAA96499.1; -. HSSP; P13501; 1RTN.
   22; Conservative
   STANDARD;
   84 EYINYL 89
  SEQUENCE FROM N.A.
   Best Local Similarity
   62 MILNKL 67
   NCBI_TaxID-10116;
  DISULFID
   SY04_RAT
P50230;
  DISULFID
   Query Match
  SIGNAL
   Matches
SY05_RAT
  RESULT
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DISULFID
   DISULFID
  Genew;
  CHAIN
 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licensedisb-sib.ch).
   ij
  ALINEATECON CYTCKING RES. 19:227-234(1999).

-I TURETECON THAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA
RECEPTORS THAT ALSO RECGGNIZE MIP-1 ALPHA. IT INDUCED
INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS,
AT CONCENTRATIONS OF 100-1, 000 NM, AND WAS INACTIVE ON T
LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE
PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.
-I SUBCELLULAR LOCATION: Secreted.
-I ALTERNATIVE PRODUCTS: 2 ISOFORMS; HCC-1 (SHOWN HERE) AND HCC-3;
ARE PRODUCED BY ALTERNATIVE SPLICING.
-I TESSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL.
  MEDIJNE-99228475; PubMed-10213461; MeDijne-99228475; PubMed-10213461; Momiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.; Organization of the chemokine gene cluster on human chromosome 17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and RANTES.";
   TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE MARROW, PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
  Gaps
   -> QTGGKPKVVKIQLKLVG (IN ISOFORM HCC-
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADP 55
  28 GPY----HPSECCFTYITYKIPRQRIMDYYETNSQCSKPGIVFITKRGHSVCTNP 78
                      Pardigol A., Forssmann U., Zucht H.-D., Loetscher P., Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.; "HCC-2, a human chemokine: gene structure, expression pattern, and
  4;
   Length 93;
  SMALL INDUCIBLE CYTOKINE A14
  ; Score 114; DB 1; Length 93; Pred. No. 1.4e-07; 11; Mismatches 21; Indels
  DDDB899DC9148836 CRC64;
   biological activity.";
Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998).
  Ä.
   BY SIMILARITY
BY SIMILARITY
   94
  PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. Cytokine; Signal; Alternative splicing.
  InterPro; IPR000827; CC_chemkine_sml
InterPro; IPR001811; Chemokine_ILB.
   PRT;
          MEDLINE-98263352; PubMed-9600961;
  EMBL; 270292; CAA94307.1; -...
EMBL; 270293; CAA94309.1; -...
EMBL; A49269; CAA89263.1; -...
EMBL; AF088219; AAC63329.1; -...
EMBL; AF088219; AAC33982.1; -...
HSSP; P13236; 1HUM.
  93 AA; 10678 MW;
  EMBL; 249270; CAA89264.1; -.
  29.8%;
34.5%;
  Query Match 29.8
Best Local Similarity 34.5
Matches 19; Conservative
  C-C) (CHEMOKINE CC).
   STANDARD;
   Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
   19
93
75
27
   MIM; 601392; -
   SY17_HUMAN
ID SY17_HUMAN
  DISULFID
  DISULFID
  SEQUENCE
  SIGNAL
  RESULT 15
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15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine Al7 precursor (CCLl7) (Thymus and activation-regulated chemokine) (CC chemokine) TARC).
SCYA17 OR TARC OR A-152E5.3.
  protein-1 beta as novel functional ligands for the CCR8 receptor.";
Eur. J. Immunol. 28:582-588(1998).
-!- FUNCTION: CHEMOTACTIC FACTOR FOR T LYMPHOCYTES BUT NOT MONOCYTES
OR GRANULOCYTES. MAY PLAY A ROLE IN T CELL DEVELOPMENT IN THYMUS
AND IN TRAFFICKING AND ACTIVATION OF MATURE T CELLS. BINDS TO CCR4
AND CCR8.
   MEDLINE-993-270; PubMed-10493829; MEDLINE-993-270; PubMed-10493829; MEDLINE-993-270; Mason T., Crosby M.L., Barnstead M., Cronin L., Deslattes Mays A., Cao Y., Xu R.X., Kang H.-L., Mitchell S., Eichler E.E., Harris P.C., Venter J.C., Adams M.D.; Charlis L., Venter J.C., Adams M.D.; Charler L.D., Mitchell S., Genomics and other features in 12 Mb of DNA sequence from thuman chromosome 16p and 16q."; Genomics 60:295-308(1999).
   -:- SUBCELLULAR LOCATION: Secreted.
-:- SUBCELLULAR LOCATION: Secreted.
-:- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN THYMUS AND AT LOW LEVELS. IN THE LUNG, COLON AND SMALL INTESTINE.
-:- INDUCTION: BY PHYTOHEMAGGLUTININ (PHA) IN THE PERIPHERAL BLOOD MONDUCLERAR CELLS AND BY CYTOKINES IN MONOCYTES.
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
  'Identification of the CC chemokines TARC and macrophage inflammatory
   SEQUENCE FROM N.A., AND SEQUENCE OF 24-32.
TISSUB-Perlipheral blood monocytes;
MEDILINE-96355556; PubMed=8702936;
Imal T., Yoshida T., Baba M., Nishimura M., Kakizaki M., Yoshie O.;
"Molecular cloning of a novel T cell-directed CC chemokine expressed in thymus by signal sequence trap using Epstein-Barr virus vector.";
J. Biol. Chem. 271:21514-21521(1996).
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
   Bernardini G., Hedrick J., Sozzani S., Luini W., Spinetti G.,
Weiss M., Menon S., Zlotnik A., Mantovani A., Santoni A.,
   CYTOKINE A17
   Cytokine; Chemotaxis; Inflammatory response; Signal. SIGNAL
   SMALL INDUCIBLE C
BY SIMILARITY.
BY SIMILARITY.
   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
  MIM; 601520; -.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
   RECEPTOR INTERACTION,
MEDLINE-98180363; PubMed-9521068;
   EMBL; D43767; BAA07824.1; -. EMBL; AC004382; AAC24308.1;
   HGNC:10615; SCYA17.
  Pfam; PF00048; IL8; 1.
SMART; SM0199; SCY; 1.
   23
94
57
  (Human)
  [2]
SEQUENCE FROM N.A.
   HSSP; Q98157; 1VMP.
  NCBI_TaxID=9606;
   333
  Napolitano M.;
  Homo sapiens
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SQ SEQUENCE 94 AA; 10507 MW; 7959C56BA8FDAF08 CRC64;
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|                | 1;                                                                                              |
|----------------|-------------------------------------------------------------------------------------------------|
|                | Gaps                                                                                            |
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| Score 113.5; 1 | oscinocal Sumidating (1997) (1997) Affect Montenes 11; Conservative 13; Mismatches 18; Indels ( |
| 27.74          | tive 1                                                                                          |
| 1000           | Conserva                                                                                        |
| בונו<br>בונו   | 21;                                                                                             |
| Juery Mar      | Matches                                                                                         |

Oy Dp Search completed: July 28, 2003, 04:01:12 Job time: 3.62395 secs

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GenCore version 5.1.6

Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: July 28, 2003, 03:58:28 ; Search time 12.7563 Seconds

(without alignments)

1114.528 Million cell updates/sec

Title: US-09-509-165A-31

Perfect score: 382
Sequence: 1 GPYGANMEDSVCCRDYVRYR......EICADPRVPYLKMILNKLSQ 69

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5
Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
Database : SPTRPMBL\_21:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

|   |        | lon         | attus norv | cattus norv | nus musculu | aposi's sa | railus gall | iqmodon hi | rallus gall | iqmodon hi | rallus gall | rallus gall | s taurus  |           | lis silve | elis silve<br>nus musculu | Q8sq40 felis silve<br>Q9wuz6 mus musculu<br>O9r043 mus musculu |
|---|--------|-------------|------------|-------------|-------------|------------|-------------|------------|-------------|------------|-------------|-------------|-----------|-----------|-----------|---------------------------|----------------------------------------------------------------|
|   |        | Description | 1 Luzb60   | 091zh5      | 099zu2 m    | 098158     | 08qq57 q    | 091z10     | 0918e0      | 091265     | 09pwa6      | 09100       | Ogsda6 bc | OBSAAD FE | 24 2522   | u gznw60                  | 09x0z6 m                                                       |
|   |        |             |            |             |             |            |             |            |             |            |             |             |           |           |           |                           |                                                                |
|   |        | ID          | 090zu1     | 091ZH5      | Q902U2      | 098158     | 080G57      | Q912L0     | Q918E0      | 091265     | O9PWA6      | 0910C9      | 8SQA6     | 085040    |           | 09WUZ6                    | Q9WUZ6<br>Q9R043                                               |
|   |        | DB .        |            | 11          | 11          | 12         | 13          | 11         | 13          | 11         |             |             |           |           |           |                           | _<br>                                                          |
|   | Query  | Length      | 81         | 92          | 92          | 95         | 91          | 92         | 83          | 92         | 06          | 90          | 93        | 92        |           | 93                        | 93<br>131                                                      |
| æ | Query  | Match       | 67.8       | 67.8        | 67.0        | 36.9       | 34.3        | 34.2       | 34.0        | 33.2       | 33.1        | 32.9        | 30.0      | 29.8      |           | .29.8                     | 29.8                                                           |
|   |        | Score       | 259        | 259         | 256         | 141        | 131         | 130.5      | 130         | 127        | 126.5       | 125.5       | 114.5     | 114       |           | 114                       | 114                                                            |
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61 KMILNKLS 68 | ||:||:

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|                                                           | 099824 momo sapien<br>099824 mus musculu<br>094747 mus musculu<br>09ttql equus cabal<br>095453 sonus cabal | Ogywrty equals cabal<br>Ogywrth macaca mula<br>Ogy55 gallus gall<br>Ogs292 cricetulus | Ugitts bos taurus<br>Ogittgi equus cabal<br>Qgiv84 mus musculu<br>Qgittgi equus cabal<br>QgillB cavia porce<br>Ogbdil bos taurus | 1.42                                      | USPLOA ONCOLNYNCHU<br>Q36792 spinacia ol<br>Q41376 spinacia ol<br>Q9ptf8 brachydanio |
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| 4 tr                                                      | 79 4 095689<br>116 11 099M24<br>148 11 099YD7<br>75 6 09TTQ1<br>1100 6 095MD5<br>81 6 095MD5               | 1322                                                                                  | 97 6 Q91T36<br>1100 6 Q9TTQ4<br>133 11 Q91V84<br>99 6 Q9TTQ3<br>97 1 Q9Z318<br>97 6 Q9BDJ2                                       | 911125                                    |                                                                                      |
| 107 28.0<br>105 27.5<br>103 27.0<br>102 26.7<br>99.5 26.0 | 98.5 25.0<br>92.5 24.2<br>89.5 23.4<br>89 23.4                                                             | •                                                                                     | 79.5 20.8<br>79.5 20.8<br>79.5 20.7<br>77.5 20.3<br>77 20.2<br>75.5 19.8                                                         | ັນ ຄ.ຄ.ຄ.ຄ.                               |                                                                                      |
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## ALIGNMENTS

|                  |                   |                          |             |             |                                          |                          |                                                                   |                                                                       |                   |    |                    |                                       |                                                                |            |                                                                |                                                            |               |                    |                             |                     |                                     |                        |                        |         |                         |                   | ô                                                            | 09                                                             | 73                |
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|                  |                   |                          |             |             |                                          |                          | i.;                                                               | Mammalia; Eutheria; Rodentia; Sciuroquathi; Muridae; Murinae; Rattus. |                   |    |                    |                                       |                                                                |            |                                                                |                                                            |               |                    |                             |                     |                                     |                        |                        |         |                         |                   | Gaps                                                         | 1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL |                   |
|                  |                   |                          |             |             |                                          |                          | Stom                                                              | ae; R                                                                 |                   |    |                    |                                       | s.                                                             |            | lary                                                           |                                                            |               |                    |                             |                     |                                     |                        |                        |         |                         | .,                | 0;                                                           | EICAD                                                          | DICAD             |
|                  |                   |                          |             |             |                                          |                          | tele                                                              | urin                                                                  |                   |    |                    |                                       | nani                                                           |            | edul.                                                          | -/+8                                                       |               |                    |                             |                     |                                     |                        |                        |         |                         | h 81              | ls.                                                          | FRDK                                                           | IKNR              |
|                  |                   |                          |             | е<br>Э      |                                          |                          | a; Eu                                                             | ae; N                                                                 |                   |    |                    |                                       | Romag                                                          |            | micn                                                           | +, CI                                                      |               |                    |                             |                     |                                     |                        |                        |         | 64;                     | Length 81;        | Indels                                                       | WLLT                                                           | MEI I             |
|                  |                   |                          | date)       | updat       |                                          |                          | ebrat                                                             | Murid                                                                 |                   |    |                    |                                       | Α.,                                                            |            | o thy                                                          | , CD4                                                      |               |                    |                             |                     |                                     |                        |                        |         | B CRC                   |                   | , 6<br>9;                                                    | CPRPG                                                          | CRKPG             |
|                  | 81 AA.            |                          | e up        | 10n         |                                          |                          | Vert                                                              | hi;                                                                   |                   |    |                    |                                       | Epp                                                            |            | sed to                                                         | CD3+                                                       |               |                    |                             |                     |                                     |                        |                        |         | 15080                   | DB                | l . Ie-                                                      | TSDS                                                           | TSKS              |
|                  | 8                 | ~                        | dneuc       | notat       | ent).                                    |                          | ata;                                                              | ognat                                                                 | ,                 |    |                    | S;                                    | C.J.,                                                          |            | caliz                                                          | for                                                        |               |                    |                             |                     |                                     |                        |                        |         | 1A004                   | 259;              | mo. J                                                        | KHFYV                                                          | KEFY              |
|                  | PRT;              | (TrEMBLrel. 13, Created) | st se       | st an       | Macrophage-derived chemokine (Fragment). |                          | Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; | Sciur                                                                 |                   |    |                    | STRAIN-SPRAGUE-DAWLEY; TISSUE-THYMUS; | Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S., |            | "Macrophage derived chemokine is localized to thymic medullary | epithelial cells and is chemotactic for CD3+, CD4+, CD8+/- |               |                    |                             |                     | InterPro; IPR001811; Chemokine_IL8. |                        |                        |         | A0A7ED1A0045D80B CRC64; | Score 259; DB 11; | Liarity 63.2%; Fred. NO. 1.10<br>Conservative 16; Mismatches | PLRW                                                           | <br>PPRFV         |
|                  |                   | 3, Cr                    | 3, La       | 7, La       | ine (                                    |                          | ta;                                                               | tia;                                                                  |                   |    |                    | SSUE=                                 | ., Ra                                                          |            | <1ne                                                           | nemot                                                      |               |                    | 1; -                        |                     | okine                               |                        |                        |         |                         |                   | 16;<br>16;                                                   | /RYRL                                                          | : : <br>IRHPL     |
|                  | ARY;              | 1. 1                     | i. 1:       | 1. 1.       | <b>Jemok</b>                             | ıt).                     | hord                                                              | soden.                                                                |                   |    |                    | (; TI                                 | ıni P                                                          |            | shemo!                                                         | is c                                                       |               |                    | 5764                        |                     | Chemo                               | _;                     | ٦,                     | _       | 81 AA; 9212 MW;         | 67.88;            | 63.2%;<br>:ive                                               | CRDY                                                           | :  <br> <br> <br> |
|                  | PRELIMINARY;      | MBLre                    | MBLre       | MBLre       | ed ch                                    | s (Ra                    | oa;                                                               | ia; F                                                                 |                   |    | Α.                 | AWLEY                                 | magna                                                          |            | ved c                                                          | and                                                        |               |                    | AAD55                       | . 6М                | 811;                                | 1.8; 1                 | SCY;                   |         | . 6                     | ;                 | сy<br>ervat                                                  | EDSVC                                                          | EDSIC             |
|                  | PREL              |                          |             |             | deriv                                    | egicu                    | Metaz                                                             | uther                                                                 | 10116             |    | OM N               | GUE-D                                 | ., Ro                                                          |            | deri                                                           | cells                                                      |               | (1999              | 477;                        | 7; 10               | PR001                               | 48; I                  | 199;                   | П       | 81 AA                   |                   | Cons                                                         | YGANM                                                          | IIII:<br>YGANV    |
|                  |                   | -2000                    | -2000       | -2001       | lage-                                    | norv                     | ta;                                                               | ia; E                                                                 | -QIX              |    | E FR               | -SPRA                                 | 1 D.H                                                          | 3          | phage                                                          | lial                                                       | tes.          | 0-0:0              | <b>AF163</b>                | 29815               | I . (0)                             | PE000                  | SMOO                   | ~       |                         | ch<br>Si          | 43;                                                          | 1 GP                                                           | 14 GP             |
| 1                | 090zul<br>090zul; | 01-MAY-2000              | 01-MAY-2000 | 01-JUN-2001 | crop                                     | Rattus norvegicus (Rat). | kary                                                              | mma]                                                                  | NCBI_TaxID=10116; | _  | SEQUENCE FROM N.A. | 'RAIN=                                | antry                                                          | Gray P.W.; | lacro                                                          | ithe]                                                      | thymocytes."; | Blood 0:0-0(1999). | EMBL; AF163477; AAD55764.1; | HSSP; Q98157; 1CM9. | terPi                               | Pfam; PF00048; IL8; 1. | SMART; SM00199; SCY; 1 | NON_TER | SEQUENCE                | Query Match       | best Local Similarity<br>Matches 43; Conserv                 |                                                                |                   |
| RESULT<br>090201 |                   |                          | 01          | 01          |                                          |                          |                                                                   |                                                                       |                   |    |                    |                                       | Ī                                                              | Ĭ          |                                                                | Ī                                                          |               |                    |                             | _                   |                                     |                        |                        |         |                         | Query             | Best Loc<br>Matches                                          |                                                                |                   |
| RE               | M P               | DŢ                       | DŢ          | Ω           | DE                                       | SO                       | 8                                                                 | ႘                                                                     | ŏ                 | RN | RP                 | S <sub>C</sub>                        | RA                                                             | RA         | RT                                                             | RT                                                         | RT            | RL                 | DR                          | DR                  | DR                                  | DR                     | DR                     | FT      | S                       |                   |                                                              | Οy                                                             | qа                |

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PRELIMINARY;
  68
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  SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
  1 :1:111
85 KKLLHKLS
   SEQUENCE FROM N.A.
  61 KMILNKLS
   by KSHV
   Query Match
   Q98158
Q98158; (
  (HHV8)
   genes
                  Best Loc
Matches
  RESULT 4
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  84
  STAIN-LEW;
Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J.,
Bacon K.B., Feng L.;
"Mononuclear cell-infiltrate inhibition by blocking macrophage-derived
chemokine results in attenuation of developing crescentic
chemokine results in attenuation of developing crescentic
glomerulonephritis.",
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AF432871, AAL30397.1;
InterPro; IPR001811; Chemokine_ILB.
Pfam: PF00048; ILB; 1.
  25 GPYGANVEDSICCQDYIRHPLPPRFVKEFYWTSKSCRKPGVVLITIKNRDICADPRMLWV
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL
   Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
  Gaps
  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
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  "Macrophage derived chemokine is localized to thymic medullary epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
  Chantry D.H., Romagnani P., Raport C.J., Epp A., Romagnani S., Gray P.W.;
  Length 92;
   9; Indels
  1199; SCY; 1.
92 AA; 10331 MW; 17FE31A87F352E63 CRC64;
   92 AA; 10420 MW; CBC88124502EFC0C CRC64;
   01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
  Last sequence update)
Last annotation update)
  67.8%; Score 259; DB 11;
63.2%; Pred. No. 1.3e-26;
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  92 AA
  16; Mismatches
   85
   Blood 0.0-0(1999)
EMBL, AF163476, AAD55763.1; -
HSSP, Q9B157, 1CM9.
MGD; MGI:1306779; Scya22.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PP00048; IL8; 1.
SMART; SM00199; SCY; 1.
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  Macrophage-derived chemokine CCL22
   Macrophage-derived chemokine.
   01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2002 (TrEMBLrel. 20,
   43; Conservative
   PRELIMINARY;
   PRELIMINARY;
81
   61 KMILNKLS 68
  | ||:||:
85 KKILHKLA 92
  Mus musculus (Mouse)
   Pfam; PF00048; IL8; SEQUENCE 92 AA:
   Local Similarity
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  SEQUENCE FROM N.A.
74 KKILHKLA
  NCBI_TaxID=10116;
  NCBI_TaxID=10090;
  STRAIN-BALB/C;
  thymocytes."
  Query Match
  SEQUENCE
   Q912H5
  Q912H5
   0902U2
   SCXA22
   Matches
  RESULT
Q9QZU2
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   1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYL 60
   25 GPYGANVEDSICCQDYIRHPLPSRLVKEFFWTSKSCRKPGVVLITVKNRDICADPRQVWV 84
   MEDLINE-97296220; PubMed-9151804;
Neipel F., Albrecht J.C., Fleckenstein B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its pathogenicity?";
   SEQUENCE FROM N.A.
MEDILINE-97121480; Pubmed-8962146;
Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
Fusso J.J., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
"Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
  Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8).
Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
   SEQUENCE FROM N.A.
Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
  SEQUENCE FROM N.A. Russo J., Yan M., Maddalena D., Russo J.J., Pan M., Maddalena D., Russo J.J., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
  <u>`</u>
  SEQUENCE FROM N.A.
MEDLINE=97094384; PubMed=8939871;
MOOTE P.S., Bashoff C., Welss R.A., Chang Y.;
"Molecular mimicry of human cytokine and cytokine response pathway
  Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Clufo Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.; Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
   ö
Length 92;
   Indels
  Ren S., Lin S.-F., Miller G.;
Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases.
EMBL: U75698; AAC57095.1;
EMBL: U74585: AAB61704.1;
EMBL: U93872; AAB62671.1;
  Sun R., Lin S.-F., Miller G.;
Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases
  01-FEB-1997 (TrEMBLrel. 02, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
ORF K6.
   Proc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996).
67.0%; Score 256; DB 11;
61.8%; Pred. No. 3.2e-26;
11ve 17; Mismatches 9;
  95 AA.
  PRT;
  Gammaherpesvirinae; Rhadinovirus.
NCBI_TaxID=37296;
   I. Virol. 71:4187-4192(1997).
   Science 274:1739-1744(1996).
                                   Local Similarity 61.8%
nes 42; Conservative
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Gaps

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25 PRGSDPPIS-CCFSYASRKLPRNFVTDYYETSSLCSKPAVVFLTRRGKEVCADPSQPWVN 83
   2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
   34.2%; Score 130.5; DB 11; Length 92; 40.9%; Pred. No. 1.3e-09; Ive 10; Mismatches 28; Indels 1
                   InterPro: IPR000827; CC_chemkine_sml.
InterPro: IPR001811; Chemokine_ILB.
Pfam: PF00048; ILB: 11.
PROSTIE: PS00402: SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 92 AA: 10195 MW; A34FDE21E6FA9C2E CRC64;
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   1 21
22 89
89 AA; 9896 MW;
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  PRELIMINARY;
  PRELIMINARY;
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  Pfam; PF00048; IL8; 1. SMART; SM0199; SCY; 1
  62 MILNKLSQ 69
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Best Local Similarity
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  62 MILNKL 67
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SIGNAL
  Q918E0
  0918E0
  Gallus
  091265
  CHAIN
  Matches
   RESULT 7
Q918E0
   RESULT 8
Q91265
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  1;
   25 PFGA--DITYCCFNYSVRKIPQNHVKDYFYTSSKCPQAAVVFITRKGRQVCANPDARMVK 82
   61
  2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLIFRDKEICADPRVPYLK
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
   Gaps
  2; Gaps
  12 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKL 67
   Sigmodon hispidus (Hispid cotton rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
  SEQUENCE FROM N.A.
MEDILINE-21655115; PubMed-11797102;
Hughes S., Haynes A., O'Regan M., Bumstead N.;
"Identification, mapping, and phylogenetic analysis of three novel chicken CC chemokines.";
   ö
   SEQUENCE FROM N.A.
Blanco J.C., Pletneva L.M., Prince G.A.;
"Sigmodon hispidus cytokines, chemokines and interferons.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
   Query Match 34.3%; Score 131; DB 13; Length 91; Best Local Similarity 36.4%; Pred. No. 1.1e-09; Matches 24; Conservative 18; Mismatches 22; Indels
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Pfam; PF00048; IL8; 1.
SWART; SM00199; SCY; 1.
Hypothetical protein.
SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;
  Immunogenetics 53:674-683(2001).
EMBL; AY037859; AAK84432.1; -.
SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;
  0912L0;
0-10 DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Macrophage inflammatory protein 1 beta.
  01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
  36.9%; Score 141; DB 12; 39.3%; Pred. No. 5.5e-11;
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EMBL; U71366; AAC34943.1; -. EMBL; U50138; AAD11536.1; -. HSSP; Q98157; 1VMP.
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Best Local Similarity 39.3%
Matches 22; Conservative
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   Chemokine ah294
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   080G57
   Q91ZL0
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   RESULT 6
   091ZL0
  08065
  SO W W D D R W SO S W W S S W W S S W W S S W W S S W W S S W W S S W W S S W W S W W S W W S S W W S S W W S S W W S S W W S S W W S S W W S S W W S W W S W W S S W W S S W W S S W W S 
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61
  23 PVGPDV--PTCCTTYITHKIPRNLIQRHYSTSTSCSKPAIIFITKKEREVCANPSDPWVQ 80
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6FA2EA7A4950CA75 CRC64;
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
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01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Macrophage inflammatory protein-1 alpha.
   SEQUENCE FROM N.A.
MEDLINE-20170941; Pubmed-10704244;
Sick C., Schneider K., Staeheli P., Welning K.C.;
"Novel Chicken CXC and CC chemokines.";
Cytokine 12:181-186(2000).
   Ouery Match 34.0%; Score 130; DB 13; Best Local Similarity 27.9%; Pred. No. 1.5e-09; Matches 19; Conservative 23; Mismatches 24;
89 AA
  POTENTIAL.
   MIP1 ALPHA.
Sigmodon hispidus (Hispid cotton rat).
  DT DT DT OS
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90 AA

PRT;

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PRELIMINARY;
   62 MILNKL 67
  82 DYMNKM 87
   EXITDL 89
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  NCBI_TaxID=9913;
   Query Match
   Q8SQA6
  RESULT 11
   08SOA6
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   25 PYGAD-TPTFCCFSYGR-QIPRKFIADYFQTSSLCSEPGIIFLTKRNRHVCADPKETWVQ 82
  2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK 61
   2 PYGANMEDSVCCRDYVRYRLPLRVYKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK 61
  81
   Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
  Hughes S.M., Bumstead N.;
"Mapping of the gene encoding the chicken homologue of the mammalian
chemokine SCIA4.";
Chordata; Craniata; Vertebrata; Euteleostomi; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
   1;
  33.1%; Score 126.5; DB 13; Length 90; 34.8%; Pred. No. 4.3e-09; tive 17; Mismatches 25; Indels 1
   Blanco J.C., Pletneva L.M., Prince G.A.;
"Sigmedon hispidus cytokines, chemokines and interferons.",
"Sigmedon hispidus cytokines, chemokines and interferons.",
"Grandle J. Cort. 1: -
InterPro: IPR000827; CC_chemkine_sml.
InterPro: IPR001811; Chemokine_IL8.
Pfam: PF00048; IL8: 1.
PROSITE: PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 92 AA; 10334 MW; CF9AAB3D94DCAF79 CRC64;
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Last annotation update)
  Created)
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Matches 23; Conservative
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82 DYMNKM 87
   62 MILNKL 67
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NCBL_TaxID-9031;
   Chemokine.
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   09PWA6;
   Q9PWA6
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   2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK 61
   23 PVGSDPPTS-CCFTYISRQLPFSFVADYYETNSQCPHAGVVFITRRGREVCANPENDWVQ 81
   2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK 61
   | 11

| SEQUENCE FROM N.A.

| SEQUENCE FROM N.A.

| Hughes S.M., Bumstead N.;

| Mapping of the gene encoding the chicken homologue of the mammalian

| Chemokine SYTR4...;

| Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.

| EMBL; AJ243034; CAB45103.1; -

| InterPro; IPR000827; CC_chenkine_sml.

| InterPro; IPR0011; Chemokine_IL8.

| Pfan; PP00148; IL8: 1.

| PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.

| PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.

| PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
   Gaps
   Gaps
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
   1;
   ä
   32.9%; Score 125.5; DB 13; Length 90; 34.8%; Pred. No. 5.9e-09; tive 16; Mismatches 26; Indels 1
  26; Indels
   Werling D.; "Role of chemokines in RSV infection."; "Role of chemokines in RSV infection."; Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AY077840; AAL78060.1; "1266BFBFCEE5FBE9 CRC64; SEQUENCE 93 AA; 10118 MW; 1266BFBFCEE5FBE9 CRC64;
   01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Macrophage inflammatory protein-1 alpha.
Bos taurus (Bovine).
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
   Query Match 30.0%; Score 114.5; DB 6; Best Local Similarity 30.3%; Pred. No. 1.7e-07; Matches 20; Conservative 19; Mismatches 26;
  Macrophage inflammatory protein 1-beta
SCYA4
   PRT;
  Best_Local Similarity 34.89
Matches 23; Conservative
   Gallus gallus (Chicken).
   PRELIMINARY;
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RESULT 12

RESULT 10 Q910C9

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SEQUENCE FROM N.A.
TISSUE-THYMUS GLAND;
Strausberg R.;
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  HSSP; Q98157; 1CM9
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   SEQUENCE
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SIGNAL
   Q9R043;
   CHAIN
   Q9R043
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  EMBL;
  EMBL;
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  29R043
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  q
   25 PYAS--DITPCCFAYLSHPLPLTHLQEYFYTSSKCSMPAVVFVTRRKRQVCANPQKKWVR 82
   Rolink A.G.; "Three chemokines with potential functions in T lymphocyte-independent
   2 PYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
   SECUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUB-PANCREAS;
STRAIN-C57BL/6J; TISSUB-PANCREAS;
STRAIN-C57BL/6J; TISSUB-PANCREAS;
Kawai J.; Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
Salto T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
Sakai K., Okido T., Pesolo M., Aono H., Baldarelli R., Barsh G.,
Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
   Gaps
  U1-JUN-2002 (TrEMBLrel. 12, Last Sequence update)
Thymus and activation-regulated chemokine precursor (Small inducible cytokine subfamily A17).
TARC OR ABCD-2 OR SCYA17.
Mus musculus //www.
   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
NCBL_TaxID=10090;
  Lieberam I., Forster I.; "The murine b-chemokine TARC is_expressed by subsets of dendritic
  Euteleostomi;
Felis.
  .;
?
   Schaniel C., Sallusto F., Ruedl C., Sideras P., Melchers F.,
   DB 6; Length 92;
   29.8%; Score 114; DB 6; Length 92 31.7%; Pred. No. 2e-07; Live 19; Mismatches 20; Indels
   SEQUENCE FROM N.A.

Kimura T., Kano R., Hasegawa A.;

Kimura T., Kano R., Hasegawa A.;

"molecular cloning of feline RANTES gene.";

Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.

EMBL, AB083479; BAB88940.1;

SEQUENCE 92 AA: 10167 MW; 2E6F087140BA3CE8 CRC64;
  cells and attracts primed CD4+ T cells.";
Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases
   Felis silvestris catus (Cat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
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Last annotation update)
             92 AA.
  93 AA.
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Eur. J. Immunol. 29:2934-2947(1999).
  Created)
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21,
21,
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01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
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Q8SQ40;
   RANTES
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  Matches
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088040
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  Schaniel C., Sallusto F., Ruedl C., Sideras P., Melchers F., Rolink A.G.; "Three chemokines with potential functions in T lymphocyte-independent
Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F., Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L., Wynshaw-Boris A., Yoshida K., Hasegawa Y., Rawaji H., Rohtsuki S.,
  Gaps
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
   "Functional annotation of a full-length mouse cDNA collection.";
  ö
  12 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK 61
   THYMUS AND ACTIVATION-REGULATED
   Indels
  tted (APR-2002) to the EMBL/GenBank/DDBJ databases AJ242587; CAB45256.1; -.
   MGD: MGI:1329039; Scyal7.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
PROSTITE; PS004042; SCY; 1.
PROSTITE; PS0472; SMALL_CYTOKINES_CC; 1.
SEQUENCE 131 AA; 15016 MW; 9515123376912A7E CRC64;
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   Last sequence update)
Last annotation update)
   29.8%; Score 114; DB 11;
42.0%; Pred. No. 2e-07;
Live 10; Mismatches 19;
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  and -dependent B lymphocyte stimulation.";
Eur. J. Immunol. 29:2934-2947(1999).
EMBL; AF125570; AAD56600.1; -.
   Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
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  MGD; MGI:1329039; Scyal7.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
   Created)
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   TISSUE=LIVER;
MEDLINE=99438049; Pubmed=10508268;
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AF125571; AAD56601.1;
AK007663; BAB25171.1;
BC028505; AAH28505.1;
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01-MAY-2000 (TrEMBLrel. 13,
01-MAR-2002 (TrEMBLrel. 20,
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Best Local Similarity 42.0%
Matches 21; Conservative
   Nature 409:685-690(2001).
  PRELIMINARY;
   01-MAY-2000 (TrEMBLrel. 01-MAR-2002 (TrEMBLrel.
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   10 SVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLKMILNKL 67
   Gaps
                                 Gaps
  Mip-la).
Homo sapiens (Human).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
   ö
   61
 Length 131;
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Similar to small inducible cytokine A3 (homologous to mouse
   12 CCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPYLK
  28.8%; Score 110; DB 4; Length 93; 29.3%; Pred. No. 6.8e-07; tive 16; Mismatches 25; Indels
                                 Indels
   Strausberg R.;
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, BEC007783: AAH07783.1;
InterPro: IPR001827; CC_chemkine_sml.
InterPro: IPR001811: Chemokine_IL8.
Pfam: PF00048: ILB: 1.
PROSITE: PS00472; SMLL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 93 AA: 10144 MW; A7A78E374006D61E CRC64;
Query Match 29.8%; Score 114; DB 11; Best Local Similarity 42.0%; Pred. No. 2.8e-07; Matches 21; Conservative 10; Mismatches 19;
  PRT;
  Query Match 28.8°
Best Local Similarity 29.3°
Matches 17; Conservative
  PRELIMINARY;
   SEQUENCE FROM N.A.
TISSUE-B-CELL;
   Q96168
Q96168;
   RESULT 15
Q96168
ID Q96168
  ò
   g
   g
  δ
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Search completed: July 28, 2003, 04:02:52 Job time: 12.7563 secs

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95.5
362
11
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  /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1994.DAT:*
  July 28, 2003, 03:59:28 ; Search time 15.0756 Seconds
   379
1 GPYGANMEDSVCCRDYVRYR.....EICADPRVPWVKMILNKLSQ
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  GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
  Total number of hits satisfying chosen parameters:
  908470 segs, 133250620 residues
   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
  OM protein - protein search, using sw model
   BLOSUM62
Gapop 10.0 , Gapext 0.5
  A_Geneseq_101002:
  Minimum DB seq length: 0
Maximum DB seq length: 200000000
   US-09-509-165A-32
   Title:
Perfect score:
Sequence:
   Scoring table:
  Database :
  Searched:
  Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1999.DAT

| Description                   | Human macrophage d | Macrophage derived | Human macrophage-d | Human chemokine MD | Human MDC protein. | Human macrophage d | Macrophage derived | Human macrophage-d | Human chemokine pr | Macrophage derived |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| qı                            | AAW20062           | AAY24416           | AAY05875           | AA020022           | AA014155           | AAW20060           | AAY24413           | AAY05873           | AAW59432           | AAW20058           |
|                               | 18                 | 20                 | 20                 | 23                 | 23                 | 18                 | 20                 | 20                 | 19                 | 18                 |
| %<br>Query<br>Match Length DB | 69                 | 69                 | 69                 | 69                 | 69                 | 70                 | 7.0                | 70                 | 98                 | 93                 |
| Query<br>Match                | 100.0              | 100.0              | 100.0              | 95.5               | 95.5               | 95.5               | 95.5               | 95.5               | 95.5               | 95.5               |
| Score                         | 379                | 379                | 379                | 362                | 362                | 362                | 362                | 362                | 362                | 362                |
| Result<br>No.                 | -                  | 7                  | e                  | 4                  | S                  | 9                  | 7                  | 8                  | σ                  | 10                 |

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Gaps

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disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atheroscierosis, arthritis and pulmonary fibrosis.
   The present sequence represents synthetic analogue MDC-eyfy of the novel human macrophage derived C-C chemokine MDC (see also AAY05871). MDC-eyfy consists of amino acid residues 1-69 of the MDC mature polypeptide, with residues 20-31 (His-Phe-Tyr-Trp) replaced with the sequence Glu-Tyr-Phe-Tyr. derived from the amino acid sequence of the chemokine RANTES. The analogue is expected to be an antagonist of MDC, inhibiting activity by competitively binding to the receptor that recognises MDC or by forming inactive heterodimers with MDC. Alternatively, MDC eyfy may confer some of the activities RANTES, such as chemotaxis of I lymphocytes, monocytes or
   Vertebrate Macrophage Derived Chemokines, analogues and antagonists
  MDC analogue; macrophage derived chemokine; C-C chemokine; human; antagonist; chemoattractant; antiproliferative; dermatological; immunosuppressive; antificiammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV; infection; lupus erythematosus; therapy; vaccine; RANTES.
   inflammatory and immune responses allowing for the treatment of
   Human macrophage-derived C-C chemokine MDC analogue MDC-eyfy.
  Length 69;
   Indels
   Raport CJ
   28..31
/note= "His:Phe-Tyr-Trp in native MDC"
  100.0%; Score 379; DB 20;
100.0%; Pred. No. 6.4e-42;
ive 0; Mismatches 0;
   Gray PW,
   Example 11; Page 13; 147pp; English.
   Godiska R,
  Location/Qualifiers
  AA.
  AAY05875 standard; Protein; 69
   98WO-US20270
   98US-0067447
97US-0939107
  (first entry)
  Local Similarity 100.
   Deeley MC,
   69
  WPI; 1999-254715/21
  KMILNKLSO
  61 KMILNKLSQ
  (ICOS-) ICOS CORP.
  ¥
   Misc-difference
  69
   WO9915666-A2
   sapiens
   28-APR-1998;
26-SEP-1997;
   28-SEP-1998;
  02-AUG-1999
   Chantry DH,
  01-APR-1999
  Synthetic
   AAY05875;
  Sequence
  Query Match
   Homo
   Matches
  RESULT 3
   AAY05875
   888888
   g
  δ
   q
   ò
  ö
  9
   9
   Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
   A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytckines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound hearling and anglogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes ang/or primers for the identification of MDC
  Gaps
   The present sequence represents a macrophage derived chemokine (MDC) analogue. MDC analogues are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate
   ö
  encoding sequences can be derived from MDC encoding sequences
  Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
  Length 69;
   Indels
   100.0%; Score 379; DB 18;
100.0%; Pred; No. 6.4e-42;
ive 0; Mismatches 0;
  Macrophage derived chemokine analogue MDC-eyfy.
 Crohn's disease, rheumatoid arthritis, etc.
   Example 11; Column 61; 43pp; English.
                           Claim 25; Page 84; 106pp; English.
  Ā
  AAY24416 standard; peptide; 69
  96US-0660542.
95US-0479620.
95US-0558658.
  96US-0660542
  (first entry)
  Ouery Match
Best Local Similarity 100.0
Matches 69; Conservative
  69
  KMILNKLSQ 69
   Gray PW;
  WPI; 1999-443621/37
  61 KMILNKLSQ
  (ICOS-) ICOS CORP.
   69 AA;
  24-SEP-1999
  Homo sapiens.
  07-JUN-1995;
  07-JUN-1996;
  US5932703-A
   07-JUN-1996;
   03-AUG-1999
   Godiska R,
   Synthetic.
  19
   AAY24416;
   Sequence
   RESULT
  q
  g
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Gaps

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Indels

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65;
  AA014155;
   Sequence
  Query Match
Best Local
  Matches
       Matches
   RESULT 5
   AA014155
   g
   QQ
   ò
  ò
  ò
  ö
   Human, chemokine, anti-HIV; antiasthmatic; antiarthritic; antirheumatic; antiarteriosclerotic; dermatological; antiinflammatory; antiallergic; immunosuppressive; polymer-modified bioactive synthetic chemokine; HIV; AIDS; asthma; allergic rhinitis; atopic dermatitis; rheumatoid arthritis; atherosclerosis; organ transplant rejection; MDC.
  and to methods for their production and use. The compounds and methods of the backbone of the invention are useful in the analysis and treatment of various diseases states e.g. HIV and AIDS related disorders, asthma, allergic rhinitis, atopic dermatitis, atheroma/atherosclerosis, organ transplant rejection, and rheumatoid arthritis. This sequence represents the human chemokine MDC protein of the invention.
  The invention relates to polymer-modified bioactive synthetic chemokines
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
  Gaps
                       the proliferation
eosinophils. MDC antagonists are used in claimed methods for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of cells that express CCR4, for inhibiting or palliating an allergic reaction in a mammal, and for
  New polymer-modified bioactive synthetic chemokines useful in the treatment of various diseases or disorders e.g. asthma
  Indels
  Chen S,
   DB 20;
  th 100.0%; Score 379; DB 20; Similarity 100.0%; Pred. No. 6.4e-42; 69; Conservative 0; Mismatches 0;
  Bradburne JA,
  Disclosure; Fig 10C; 176pp; English.
   AAO20022 standard; protein; 69 AA
   Human chemokine MDC protein.
   12-JUL-2001; 2001WO-US21933
   12-JUL-2000; 2000US-217683P
  Botti P,
  (first entry)
  69
  61 KMILNKLSQ 69
  WPI; 2002-268857/31.
  (GRYP-) GRYPHON SCI
  61 KMILNKLSQ
   69 AA;
  69 AA;
  Kochendoerfer G,
  asthma
   WO200204015-A1
   Homo sapiens
   11-JUN-2002
  Query Match
Best Local S:
Matches 69,
   AA020022;
  Sequence
   treating
   Sequence
  RESULT
```

Length 69;

Score 362; DB 23; Pred. No. 1.1e-39;

95.5%;

Best Local Similarity

Query Match

```
ö
   asthma; allergic rhinitis; atopic dermatitis; atheroma; antlinflammatory; antiasthmatic; antiallergic; dermatological; antlarteriosclerotic; antirheumatic; antiarthritic; anti-HIV; immunosuppressive; MDC;
  9
  9
   9
  9
   The present invention relates to chemokine receptor modulators, which comprise a chemokine polypeptide chain modified at N-terminus with an aliphatic chain and at least one amino acid derivatives and/or modified at its C-terminus with an aliphatic chain or polycyclic. The modulators can be used to treat diseases such as HIV infection, AIDS, asthm. allergic rhinitis, atopic dermatitis, atheroma, atheroscierosis, organ transplant rejection and rheumatoid arthritis. The present sequence is
  Chemokine receptor modulator useful for treating e.g. asthma, allergic rhinitis comprises a chemically modified carboxyl-terminus and/or amino
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
  Human; chemokine receptor modulator; chemokine; HIV infection; AIDS;
  atherosclerosis; organ transplant rejection; rheumatoid arthritis.
   ö
   Indels
  1;
  Score 362; DB 23;
Pred. No. 1.1e-39;
   3; Mismatches
  Mismatches
   ö
  Ź
   Example 3; Fig 2; 86pp; English.
   Hartley
3;
  69
  95.5%;
94.2%;
   AA014155 standard; protein;
  12-JUL-2000; 2000US-217683P
   12-JUL-2001; 2001WO-US21934
   entry)
  Conservative
  Conservative
   Offord R, Gaertner H,
   the human MDC protein.
  69
   61 KMILNKLSQ 69
  69
  (GRYP-) GRYPHON SCI.
   WPI; 2002-171703/22
  KMILNKLSQ
  KMILNKLSQ
   Similarity
  Human MDC protein.
   69 AA;
   terminus analogs
  WO200204499-A1.
   Homo sapiens
   25-APR-2002
   65;
```

AAW20060;

RESULT 6 AAW20060

```
Macrophage derived chemokine; MDC; chemotaxis; chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
  2 GPYGANMEDSVCCRDYVRYRLDLRVVKHFYWTSDSCPRPGVVLITFRDKEICADPRVPWV
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
   MDC analogue; macrophage derived chemokine; C-C chemokine; human; antagonist; chemoattractant; antiproliferative; dermatological; immunosuppressive; antifallammatory; antiasthmatic; antiaggregant; asthma; allergy; HIV: Infection; lupus erythematosus; therapy;
  The present sequence represents a macrophage derived chemokine (analogue. The MDC analogue is capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogue may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive in responses. Inflammatory disorders which may be treated in this winclude Crohn's disease (manifested by chronic inflammation of bowel), atherosclerosis, arthritis and pulmonary fibrosis.
   Human macrophage-derived C-C chemokine MDC analogue MDC(n+1).
   Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
  Length 70;
  1; Indels
  Query Match 95.5%; Score 362; DB 20;
Best Local Similarity 94.2%; Pred. No. 1.1e-39;
Matches 65; Conservative 3; Mismatches 1;
Macrophage derived chemokine analogue MDC (n+1).
   AAY05873 standard; Protein; 70 AA.
  Claim 1; Column 59; 43pp; English.
  96US-0660542.
95US-0479620.
95US-0558658.
  96US-0660542
  62 KMILNKLSQ 70
   Godiska R, Gray PW;
   WPI; 1999-443621/37
   61 KMILNKLSQ
  (ICOS-) ICOS CORP.
  70 AA;
  07-JUN-1996;
07-JUN-1995;
16-NOV-1995;
  Homo sapiens.
Synthetic.
  Homo sapiens.
Synthetic.
   02-AUG-1999
   03-AUG-1999.
   US5932703-A.
  Sequence
  vaccine.
g
   g
  ò
   δλ
  ö
  1 .GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
  A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytckines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
  Gaps
  MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation;
   Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat Crohn's disease, rheumatoid arthritis, etc.
  ö
  Length 70;
  1; Indels
  Score 362; DB 18;
Pred. No. 1.1e-39;
3; Mismatches 1;
  Human macrophage derived chemokine analogue.
   wound healing; angiogenesis; inflammation.
                                   AAW20060 standard; Protein; 70 AA.
  peptide; 70 AA.
  Claim 25; Page 83; 106pp; English.
  95.5%;
94.2%;
   95US-0558658
95US-0479620
   96WO-US10114
   (first entry)
  11-SEP-1997 (first entry)
  65; Conservative
   Gray PW;
   WPI; 1997-052324/05.
  KMILNKLSQ
   Similarity
   61 KMILNKLSQ
  AAY24413 standard;
   (ICOS-) ICOS CORP.
  70 AA;
   07-JUN-1996;
   16-NOV-1995;
07-JUN-1995;
   19-DEC-1996
   24-SEP-1999
   Godiska R,
   Synthetic
```

Sequence

Query Match Best Local

à g à 셤 AAY24413;

RESULT 7
AAY24413
ID AAY2

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Gaps

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been isolated from a 90 per cent CDIA+ CDNA library and obtained by random sequencing. Nucleic acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be used in diagnostics. The chemokines themselves are useful for treatment of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by
  represents a novel human chemokine protein, 331D5 which has
   18 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 77
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
  MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation; wound healing; anglogenesis; inflammation.
  Mammalian CC and CXC chemokines - useful for treatment of, e.g.
  Macrophage derived chemokine for treating inflammation.
  Score 362; DB 19;
Pred. No. 1.4e-39;
}; Mismatches 1;
   /label= sig_peptide
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/label= mat_protein
   Zlotnik A;
  Location/Qualifiers
   Disclosure; Page 75; 82pp; English.
   cancer and degenerative conditions
  AAW20058 standard; Protein; 93 AA.
  3;
  95.5%;
   97WO-US15315.
   96US-0025724
   95US-0558658.
95US-0479620.
   96WO-US10114
   the inventive compositions
  11-SEP-1997 (first entry)
  Conservative
   Hedrick JA,
   (SCHE ) SCHERING CORP
   WPI; 1998-207387/18.
   Local Similarity
nes 65; Conserv
  61 KMILNKLSQ
   86 AA;
  N-PSDB; AAV34996
  This sequence
  Homo sapiens
   09-SEP-1997;
   10-SEP-1996;
   WO9640923-A1
   07-JUN-1996;
   16-NOV-1995;
07-JUN-1995;
                    19-MAR-1998,
   Gorman DM,
  AAW20058;
   Sequence
  Query Match
   Peptide
   Protein
  Matches
   RESULT 10
  AAW20058
   g
  Q
  δλ
  οy
  ö
  9
   2 GPYGANMEDSVCCRDYVRYRLDLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
   Chemokine; human, detection; forensic; diagnostic; treatment; cancer; degenerative condition; abnormal proliferation; regeneration;
  The present sequence represents synthetic analogue MDC(n+1) of the novel human macrophage derived C-C chemokine MDC (see also AAY05871). MDC(n+1) consists of a Leu residue following by amino acid residues 1-69 of the MDC mature polypeptide. The analogue is expected to be an antagonist of MDC activity, inhibiting activity by competitively binding to the receptor that recognises MDC or by forming inactive heterodimers with MDC. MDC antagonists are used in claimed methods for the preparation of medicaments for the suppression of the proliferation of a mammalian immunodeficiency virus, for inhibiting platelet aggregation in a mammal, for the treatment or palliation of lupus erythematosus in a mammal, for inhibiting MDC-induced activation, chemotaxis or proliferation of cells that express CRR4, for inhibiting or palliating an allergic reaction in a mammal, and
  Vertebrate Macrophage Derived Chemokines, analogues and antagonists
  ö
  Score 362; DB 20; Length 70;
Pred. No. 1.1e-39;
3; Mismatches 1; Indels
   Gray PW, Raport CJ;
  Human chemokine protein 331D5 from CD1a+ cDNA library.
  /note= "partial signal sequence"
   16.86
/label= chemokine protein 331D5
  Example 11; Page 134; 147pp; English.
   Godiska R,
   Location/Qualifiers
  AAW59432 standard; Protein; 86 AA.
  1..15
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  95.5%;
  98WO-US20270.
  98US-0067447
97US-0939107
  (first entry)
   Local Similarity 94.2 ies 65; Conservative
   Deeley MC,
  69
   degeneration; atrophy
   WPI; 1999-254715/21
  or treating asthma
   61 KMILNKLSQ
   (ICOS-) ICOS CORP.
  70 AA;
   Homo sapiens
WO9915666-A2
  WO9811226-A2
  28-SEP-1998;
   26-SEP-1997;
  27-AUG-1998
  28-APR-1998;
   Chantry DH,
                                    01-APR-1999
```

Sequence

Query Match

Matches

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AAW59432;

RESULT 9 AAW59432 Peptide

Protein

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Gaps

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Length 86; Indels

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The present sequence represents human STCP-1. STCP-1 polypeptides demonstrate chemokine activity for T-cells. The polypeptides are useful prophylactically or therapeutically to treat HIV infection and other conditions associated with viral/bacterial pathogens infecting T-cells, macrophages or other immune system cells. They can be included (optionally chemically modified) with a pharmaceutically acceptable carrier and optionally other pharmaceuticals (e.g. AZT, antibiotics etc.) in therapeutic compositions for treating these conditions. STCP-1 also useful to assay for inhibitory compounds used to reduce circulatory system STCP-1 levels to allevate e.g. joint inflammation associated with rheumatoid arthritis, lupus or other autoimmune diseases. The polypeptides are also useful to prepare antibodies or hybridomas. The nucleic acids are useful to prepare antibodies or hybridomas. The nucleic acids are useful to produce hybridisation probes to test for STCP-1 DNA/RNA in mammalian samples.
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
  25 GPYGANMEDSYCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
   Chemokine; human; detection; forensic; diagnostic; treatment; cancer; degenerative condition; abnormal proliferation; regeneration; degeneration; atrophy.
  Gaps
Human STCP-1 polypeptides with chemokine activity - useful e.g. to treat HIV infection or other viral or bacterial pathogens infecting T-cells, macrophages or other immune system cells
  ö
  Indels
  Score 362; DB 19;
Pred. No. 1.5e-39;
3; Mismatches 1;
   /note- "chemokine protein"
  Location/Qualifiers
  Zlotnik A;
   AAW59433 standard; Protein; 93 AA.
  Claim 1; Fig 2A-F; 96pp; English.
   Human chemokine protein 331D5.
   /label= signal
  25..93
/label= 331D5
  95.5%;
ilarity 94.2%;
Conservative
   27-AUG-1998 (first entry)
  Gorman DM, Hedrick JA,
  (SCHE ) SCHERING CORP.
  Query Match
Best Local Similarity
'-has 65; Conserve
   WPI; 1998-207387/18.
N-PSDB; AAV34997.
  61 KMILNKLSQ
   93 AA;
  Homo sapiens.
   WO9811226-A2.
   09-SEP-1997;
   19-MAR-1998
   Seguence
   AAW59433;
   Peptide
  Protein
  RESULT 12
   AAW59433
   셤
  à
  1 GPYGANMEDSVCCRDYVRYRIPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
  25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLIFRDKEICADPRVPWV - 84
   Human, STCP-1; chemokine activity; T-cells; treatment; HIV infection; inhibitory compound; assay; reduce; circulatory system STCP-1 level; joint inflammation; rheumatoid arthritis; lupus.
  A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the 'treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and analoguesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences.
  Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat Crohn's disease, rheumatoid arthritis, etc.
  Length 93;
  95.5%; Score 362; DB 18; 94.2%; Pred. No. 1.5e-39; ive 3; Mismatches 1;
  Amino acid sequence of human STCP-1.
   AAW62783 standard; Protein; 93 AA.
   Claim 1; Page 73; 106pp; English.
   96US-0760127
   97WO-US21552
  24-SEP-1998 (first entry)
  Local Similarity 94.2 es 65; Conservative
   61 KMILNKLSQ 69
  85 KMILNKLSQ 93
  Andrew DP, Chang M;
   Gray PW;
   WPI; 1997-052324/05.
  WPI; 1998-333326/29.
                               (ICOS-) ICOS CORP.
   (AMGE-) AMGEN INC.
  N-PSDB; AAV38933.
   93 AA;
   N-PSDB; AAT76529
   03-DEC-1996;
  Homo sapiens
   26-NOV-1997;
   11-JUN-1998.
   Godiska R,
```

Sequence

Query Match

Matches

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AAW62783;

RESULT 11 AAW62783

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17-JUN-1999
  Devico AL,
   Sequence
  AAY26175;
  Query Match
Best Local 3
  Peptide
   Protein
   Matches
   RESULT 14
  AAY 26175
88888888
   임
  δy
  pp
   ;
0
   This sequence represents a novel human chemokine protein, 331D5.

Nucleic acid sequences encoding the chemokines can be used for detection, in e.g. forensic techniques. Antibodies and other binding agents may be used in diagnostics. The chemokines themselves are useful for treatment of, e.g. cancer or degenerative conditions. Abnormal proliferation, regeneration, degeneration or atrophy may be treated by the inventive
  9
  84
  Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy; arthritis; inflammatory disorder; cancer; Crohn's disease;
   This sequence represents the macrophage-derived chemokine (MDC). This protein is used to produce the antibodies of the invention. The
  Gaps
   useful fo
activity
             useful for treatment of, e.g
  ö
   Length 93;
   Indels
   purifying or detecting the chemokine or modulating its
   chemokine
  Score 362; DB 19;
Pred. No. 1.5e-39;
; Mismatches 1;
   for macrophage-derived
  /note= "leader peptide"
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  Claim 3; Column 21-24; 22pp; English.
  Location/Qualifiers
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  93 AA.
   Claim 1; Page 78; 82pp; English.
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   3,
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94.2%;
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  95US-0480449
   95US-0480449
   (first entry)
   Conservative
   25..93
/note=
   69
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   WPI; 1998-008038/01.
   specific
   61 KMILNKLSQ
  Similarity
  (ICOS-) ICOS CORP.
  93 AA;
   atherosclerosis.
  N-PSDB; AAT99233
             ပ္ပ
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   Homo sapiens
  07-JUN-1995;
   07-JUN-1995;
   01-APR-1998
   US5688927-A.
  18-NOV-1997
  Sodiska R,
                             cancer and
   65;
  Antibodies
              Mammalian
  AAW40811;
  Sequence
  Query Match
  Local
   Peptide
  Protein
   Matches
   RESULT 13
   AAW40811
```

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ö
antibodies are useful for purifying MDC polypeptides, for detecting endogenous MDC in a host, and for modulating binding of MDC to its receptors. The DNA encoding this sequence can be used for identifying and isolating non-human MDC homologues. The MDC protein is potentially useful for treating inflammatory disorders, cancer, etc. Antagonists of MDC can be used for treating crohn's disease, arthritis, atherosclerosis etc.
   9
   The present sequence is macrophage-derived chemokine. This belongs to the CC class of chemokines. The efficacy of a vaccine is enhanced by combining it with one or more chemokines to enhance the immune response to an antigen. This can be humoral or cell-mediated immune response. The purified chemokines, fragments, derivatives or analogues are administered either concurrently with one or more purified antigens against which an immune response is desired or within a time period either before or after antigen administeration. The chemokine gene is isolated by PCR, and administered by constructing an expression plasmid vector which can be expressed in a coordinated manner upon introduction
   84
  25 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
  MDC; vaccine; immune response; antigen;
   Gaps
  Macrophage-derived chemokine; MDC; vaccine; immune response; antihumoral response; cell-mediated response; PCR; immunostimulatory;
   ö
  "mature macrophage-derived chemokine"
  Length 93;
   Indels
   Score 362; DB 19;
Pred. No. 1.5e-39;
   Mismatches
   Claim 6; Fig 1A(1)-1A(2); 134pp; English.
   (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST
  /note= "signal peptide"
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   Methods of enhancing vaccine efficacy
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  WPI; 1999-385578/32.
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  Homo sapiens
   WO9929728-A1
   11-DEC-1997;
   29-SEP-1999
   11-DEC-1998;
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   qq
  ö
   The present invention describes macrophage derived chemokine (MDC) analogues which are capable of inhibiting MDC induced chemotaxis. Therefore, the MDC analogues may be used to modulate inflammatory and immune responses allowing for the treatment of disorders associated with excessive inflammation or overactive immune responses. Inflammatory disorders which may be treated in this way include Crohn's disease (manifested by chronic inflammation of the bowel), atherosclerosis, arthritis and pulmonary fibrosis. The present sequence represents human
  in a suitable cell. The vaccines are immunostimulatory and can be used to treat microbial diseases especially HIV.
  Macrophage derived chemokine; MDC; chemotaxis, chemotactic cytokine; inflammation; immune response; inflammatory disorder; Crohn's disease; atherosclerosis; arthritis; pulmonary fibrosis.
  Gaps
  ö
   Macrophage derived chemokine analogues useful for inhibiting macrophage derived chemokine-induced chemotaxis
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Pred. No. 1.5e-39;
3; Mismatches 1;
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  WPI; 1999-443621/37.
N-PSDB; AAX90162.
  Godiska R, Gray PW;
   61 KMILNKLSQ
   (ICOS-) ICOS CORP.
   93 AA;
                                     93 AA;
   07-JUN-1996;
07-JUN-1995;
16-NOV-1995;
  Homo sapiens.
  24-SEP-1999
   07-JUN-1996;
  03-AUG-1999
   US5932703-A
  AAY24414;
   Sequence
                                      Sequence
   Peptide
  Protein
   RESULT 15
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  g
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Appl Appli Appli

Sequence

Sequence

Sequence Sequence

Sequence

Sequence Sequence

Sequence

Sequence 3 Sequence 3 Sequence 3

Sequence Sequence S

Sequence

```
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MARDORS
ITILE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
  DB 2; Length 69;
   SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/660,542
   US-08-679-493A-155
  US-08-375-346A-5
US-08-480-449-21
US-08-63-33-682-3
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              18-09-230-637-40
   JS-08-479-603-21
  US-09-395-918-3
  ALIGNMENTS
   100.0%; Score 379;
   REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-60448
  FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/58,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTOMNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
   Sequence 32, Application US/08660542 Patent No. 5932703
   LENGTH: 69 amino acids
   TELEX: 25-3856
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
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  MOLECULE TYPE:
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  US-08-660-542-32
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   Appli
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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US-08-660-542-25
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US-09-314-833-5
US-09-334-951-6
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Maximum Match 100%
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us-09-509-165a-32.rai

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  US-08-660-542-2
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  Sequence 30, Application US/08660542
Patent No. 5932703
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE NUMBER OF SEQUENCES: 32
                      ;
   Score 362; DB 2; Length 70;
Pred. No. 6.2e-41;
.3; Mismatches 1; Indels
  CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive
                    0; Indels
   STATE: Chicago STATE: Illinois COUNTRY: United States of America COUNTRY: United States of America 21P: 6606-6402 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk COMPUTER: IBM PC COMPUTED: TO SYSTEM: PC -DOS/MS-DOS SOFTWARE: PAPELICATION DATA: APPLICATION DATA: APPLICATION NUMBER: US/08/660,542
Best Local Similarity 100.0%; Pred. No. 3.4e-43; Matches 69; Conservative 0; Mismatches 0;
  27866/33318
   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
   NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
  TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 30:
  95.5%;
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Best Local Similarity 94.28
Matches 65; Conservative
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LENGTH: 70 amino acids
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  312/474-0448
  STRANDEDNESS: single
   TOPOLOGY: linear
MOLECULE TYPE: peptide
   FILING DATE:
CLASSIFICATION: 514
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   US-08-660-542-30
  US-08-660-542-30
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   62
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   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
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GAPLICANT: GOISka, Ronald
APPLICANT: GTAY, PALTICK W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: MALGGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
  95.5%; Score 362; DB 1; Length 93; 94.2%; Pred. No. 8.8e-41; tive 3; Mismatches 1; Indels
  ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
  GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TILLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
  STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM:
SOFTWARE: Patentin Release #1.0, Version #1.25
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STATE: Illinois
COUNTRY: United States of America
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   APPLICATION NUMBER: US/08/480,449
Sequence 2, Application US/08480449
Patent No. 5688927
  FILING DATE:
CLASSIFICATION: 530
ATORNEY/AGENT INFORMATION:
NAME: GASS, DAVIG A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
  Sequence 2, Application US/08660542
Patent No. 5932703
   TELEX: 25-3856
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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   65; Conservative
  312/474-0448
   MOLECULE TYPE: protein
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  Query Match
Best Local Similarity
Matches 65; Conserve
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   Chicago
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07068
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ZIP: 0706
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  ŏλ
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   GENERAL INCORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Sortman, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijan
TITLE OF INVENTION: Modulation of Systemic Memory T cell Trafficking
FILE REPERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: US/09/232,878
CURRENT FILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 3.0
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   PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY,AGENT INFORMATION:
NAME: Gass, David A. REGISTRATION NUMBER: 38,153
REFERRINGE/DOCKET NUMBER: 27866/33318
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: US/08/660,542
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US-09-232-878-6
MEDIUM TYPE:
  FILING DATE
   TOPOLOGY:
  JS-09-232-878-6
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9
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   ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicage STATE: Illinois
  Length 93;
  Indels
   APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
  SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,603
FILING DATE:
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Pred. No. 8.8e-41;
  ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART & OLSTEIN STREET: 6 BECKER FARM ROAD
   APPLICANT: LI ET AL.
TITLE OF INVENTON: Human Chemokine Beta-13
UNMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
  3; Mismatches
   CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/32780
TELECOMMUNICATION INFORMATION:
TELEFRON: 312/474-6300
  STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
   PC-DOS/MS-DOS
   Sequence 2, Application PC/TUS9507294 GENERAL INFORMATION:
Sequence 2, Application US/08479603
Patent No. 6320023
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94.2%;
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   APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
TITLE OF INVENTION: ANALOGS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
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  ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
APPLICATION NUMBER: US/08/660,542
  Query Match 92.3%; Score 350; DB 2; L
Best Local Similarity 91.3%; Pred. No. 2.4e-39;
Matches 63; Conservative 5; Mismatches 1;
                               NAME: Gass, David A.
RECISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECOMBUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
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  STREET: 6300
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
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APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-UNW-1995
ATTORNEY/AGENT INFORMATION:
   US-08-660-542-25; Sequence 25, Application US/08660542; Sequence 25, Application US/08660542; Pattent No. 5932703; GENERAL INFORMATION:
  NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
   REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
   TELEFAX: 312/4/74-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
  TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO.
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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STRANDEDNESS: single
  TOPOLOGY: linear MOLECULE TYPE: peptide
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61 KMILNKLSQ 69
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   US-08-660-542-31
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  GENERAL INFORMATION:

APPLICANT: Godiska, Ronald

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE

TITLE OF INVENTION: 32

CORRESPONDENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun

STREET: 6300 Sears Tower, 233 South Wacker Drive

CITY: Chicago.
  Length 93;
   1; Indels
  SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,542
  Score 362; DB 5;
Pred. No. 8.8e-41;
3; Mismatches 1;
   325800-356
   APPLICATION NUMBER: PCT/US95/07294
FILING DATE: June 6, 1995
  CITY: Chicayo
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
   PRIOR APPLICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
RAPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
  ZIP: 60606-6402
COMPUTER REALABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
  Sequence 31, Application US/08660542 Patent No. 5932703
  PRIOR APPLICATION DATA:
APPLICATION NUMBER:
PILING DATE: June 5, 1995
ATTORNEY/AGENT INFORMATION:
  NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 32:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
  TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
  95.5%;
ilarity 94.2%;
Conservative
  CURRENT APPLICATION DATA:
  93 AMINO ACIDS
  MOLECULE TYPE: PROTEIN PCT-US95-07294-2
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Best Local Similarity
..... 65; Conservat
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  CLASSIFICATION:
  STRANDEDNESS:
   FILING DATE:
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   TOPOLOGY:
   US-08-660-542-31
   LENGTH:
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NAME/KEY: LOCATION:

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   APPLICANT: OFFORD, ROBIN E
APPLICANT: THOMSON, DARREN
APPLICANT: HOMSON, DARREN
APPLICANT: WILKEN, JILL
TITLE OF INVENTION: N-TERMINAL MODIFICATIONS OF RANTES AND METHODS OF USE
FILE REFERENCE: GREN-026/03US
CURRENT APPLICATION NUMBER: US/09/141,833
CURRENT FILING DATE: 1998-08-28
EARLIER FILING DATE: 1999-03-3
EARLIER PELICATION NUMBER: 60/056,292
EARLIER PELICATION NUMBER: 60/077,874
EARLIER FILING DATE: 1999-03-13
EARLIER FILING DATE: 1998-06-26
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   Length 95;
  14; Indels
  ; ORGANISM: Kaposi's sarcoma-associated herpes-like virus
US-09-230-637-26
   Query Match

Query Match

Best Local Similarity 40.3%; Pred. No. 2.4e-13;
Matches 27; Conservative 14; Mismatches 24,
  ; Score 156; DB 4;
; Pred. No. 1.9e-13;
18; Mismatches 14
                    APPLICANT: Hardwick, J. Marie
APPLICANT: Reltz, Marvin
TITLE OF INVENTION: No. 6264958el Genes of Kap
TITLE OF INVENTION: Associated Herpesvirus
FILE REFERENCE: 1107, 7837
CURRENT APPLICATION NUMBER: US,09/230,637
CURRENT FILING DATE: 1999-11-23
PRIOR PAPLICATION NUMBER: G0/022,591
PRIOR PILING DATE: 1996-07-25
PRIOR PILING DATE: 1996-07-25
PRIOR FILING DATE: 1997-07-24
NUMBER OF SEQ ID NOS: 62
SOFTWARE: FastERO for Windows Version 4.0
   ; Sequence 4, Application US/08208339A
; Patent No. 5504003
; GENERAL INFORMATION:
  US-09-141-833-5; Sequence 5, Application US/09141833; Patent No. 6168784
  41.28;
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Best Local Similarity 42.9%
Matches 24; Conservative
   ; ORGANISM: Homo sapiens
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59 REYINSL 65
  61 KMILNKL 67
  GENERAL INFORMATION:
  US-08-208-339A-4
  SEQ ID NO 26
  TYPE: PRT
   TYPE: PRT
   RESULT 12
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   g
   ò
  at position 24 is selected from the
   group consisting of arginine, glycine, alanine, valine, leucine, isoleucine, proline, serine, trreonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
   /note="The amino acid at position 27 is independently selected from the group consisting of lysine, glycine, alanine, valine, leucine, isoleucine, proline, serine, threonine, phenylalanine, tyrosine, tryptophan, aspartate, glutamate, asparagine, glutamine, cysteine, and methionine."
  /note≈"The amino acid at position 30 is independently
   /note-"The amino acid at position 50 is independently selected from the group consisting of glutamic acid, lysine, arginine, histidine, glycine, and alanine."
  /note-"The amino acid at position 59 is independently selected from the group consisting of tryptophan, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
  /note-"The amino acid at position 60 is independently selected from the group consisting of valine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine."
   ö
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
   25 GPYGANMEDSVCCRDYVRYRLPLXVVXHFXWTSDSCPRPGVVLLTFRDKXICADPRVPXX 84
  selected from the group consisting of tyrosine, serine, lysine, arginine, histidine, aspartate, glutamate, asparagine, glutamine, and cysteine.
   Gaps
   Length 93;
   ch 85.0%; Score 322; DB 2; Length 93
1 Similarity 87.0%; Pred. No. 1.8e-35;
60; Conservative 2; Mismatches 7; Indels
   /note="The amino acid
  ; Sequence 26, Application US/09230637; Patent No. 6264958; GENERAL INFORMATION:
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  MOLECULE TYPE: peptide
   APPLICANT: Hayward, Gary
  OTHER INFORMATION:
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CTHER INFORMATION:
CTHER INFORMATION:
US-08-660-542-25
   OTHER INFORMATION:
  OTHER INFORMATION:
   OTHER INFORMATION:
amino acid
   linear
                    STRANDEDNESS:
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US-09-230-637-26

RESULT 10

Ouery Match Best Local 8

Matches

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FEATURE:

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
COMPUTER: SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/722,719
FILING DATE: 30-SEP-1996
CLASSIFCATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/173,209
FILING DATE: 22-DEC 1993
FILING DATE: 08-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/46,881
FILING DATE: 05-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/46,682
FILING DATE: 06-MAY-1995
FILING DATE: 06-JUN-1995
FILING D
  Sequence 17, Application US/08936387
Patent No. 5965697
GENERAL INFORMATION:
APPLICANT: Czaplewski, Llyod G.
APPLICANT: Hunter, Michael G.
APPLICANT: Bdwards, Richard M.
APPLICANT: Daswon, Kelth M.
TITLE OF INVENTION: USE OF CHEMOKINES
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSEE: HALE AND DORR LLP
STREET: 60 State Street
CITY: BOSTON
   REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0330007
TELECOMMUNICATION INFORMATION:
  COUNTRY: United States of America
   ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
   TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 6: SEGUENCE CHARACTERISTICS:
LENGTH: 89 amino acids
  ; MOLECULE TYPE: protein US-08-722-719-6
       COMPUTER READABLE FORM:
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  :: |
82 ISDL 85
  64 LNKL 67
  RESULT 14
US-08-936-387-17
  ò
  g
   ò
   Sequence 6, Application US/08722719

Patent No. 6001606
GENERAL INFORMATION:
APPLICANT: ROSEN, CRAIG A.
APPLICANT: LI, HAODONG
TITLE OF INVENTION: RACTOR-1 (MPIF-1), MONOCYTE COLONY INHIBITORY FACTOR
TITLE OF INVENTION: (M-CIF), AND MACROPHAGE INHIBITORY FACTOR-4 (MIP-4)
NUMBER OF SEQUENCES: 64
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  Gaps
APPLICANT: LI, ET AL. TITLE OF INVENTION: Macrophage Inflammatory Protein - 3 and 4 NUMBER OF SEGURNES: 4 CORRESPONDENCE ADDRESS:
  Query Match 40.4%; Score 153; DB 1; Length 89; Best Local Similarity 42.2%; Pred. No. 4.5e-13; Matches 27; Conservative 14; Mismatches 21; Indels
   3: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVENUE, N.W., SUITE 600
  ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEE: CECCHI, STEWART & OLSTEIN STREET: 6 BECKER FARM ROAD CITY: ROSELAND
   COMPUTER REDABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: 18M PS/2
OOPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/208,339A
FILING DATE: 8 MARCH 1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
  FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D.
REGISTRATION NUMBER: 36,134
  REFERENCE/DOCKET NUMBER: 32
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
   TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
   LENGTH: 89 AMINO ACIDS
  TOPOLOGY: LINEAR MOLECULE TYPE: PROTEIN
   NEW JERSEY
: USA
  AMINO ACID
  WASHINGTON
  COUNTRY: USA
ZIP: 20005-3934
  64 LNKL 67
  :: |
82 ISDL 85
   STRANDEDNESS:
   07068
   ADDRESSEE:
  US-08-208-339A-4
   COUNTRY:
   us-08-722-719-6
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STATE:
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   GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
APPLICANT: Li, Hacodong
TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1);
TITLE OF INVENTION: Myeloid Progenitor Inhibitory Factor-1 (MPIF-1);
TITLE OF INVENTION: Polynucleotides and Polypeptides (As Amended);
FILE REPERENCE: 1488, 0333000B;
CURRENT APPLICATION NUMBER: US (09/234,951)
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EARLIER FILING DATE: 1994-03-08
EARLIER PILING DATE: 1995-06-06
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EARLIER APPLICATION NUMBER: US 08/468,775
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EARLIER PILING DATE: 1996-09-30
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SOFTWARE: Patentin Ver. 2.0
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/936,387
FILING DATE: 25-SEP-1997
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Matches 27; Conservative 14; Mismatches 24
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  Sequence 65, Application US/09334951 Patent No. 6451562
  ATTORNEY/AGENT INFORMATION:
NAME: BAKET, HOLLIE L.
REGISTRATION NUMBER: 1023
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-526-6000
TELEPHONE: 617-526-5000
  INFORMATION FOR SEQ ID NO: 17: SEQUENCE CHARACTERISTICS:
  MOLECULE TYPE: protein HYPOTHETICAL: NO
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US-09-334-951-65
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60 EYINSLS 66
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US-08-936-387-17
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Job time: 5.79832 secs
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US-09-837-446-6
Sequence 6, Application US/09837446
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Patent No. US20020013341A1
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene C.
APPLICANT: Campbell, James J.
APPLICANT: Rottman, James B.
APPLICANT: Rottman, James B.
FILE REPERENCE: STAN-110CON
TITLE OF INVENTION: Trafficking
FILE REPERENCE: STAN-110CON
CURRENT APPLICATION NUMBER: US/09/837,446
CURRENT FILING DATE: 2001-04-17
PRIOR FILING DATE: 1999-01-15
NUMBER OF SEQ ID NOS: 6
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  25 GPYGANMEDSVCCRDYVRHRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
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Pred. No. 4e-38;
3; Mismatches 1; Indels
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   APPLICANT: LI, HAODONG
SEIBUL, GEORGE
TITLE OF INVENTION: HUMAN CHEMOKINE BETA 13
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: HUMAN GENOME SCIENCES, INC.
STREET: 9410 KEY WEST AVENUE
CITY: ROCKVILLE,
   Sequence 2, Application US/09908599; Patent No. US20020055147A1; GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INTENTION: Human Chemokine Beta 13; FILE REFERENCE: PF17P3
CURRENT FILING DATE: 2001-07-20; PRIOR APPLICATION NUMBER: 09/432,768; PRIOR APPLICATION NUMBER: 09/432,768; PRIOR APPLICATION NUMBER: 09/432,768; PRIOR APPLICATION NUMBER: 09/432,768; PRIOR FILING DATE: 1999-11-03; PRIOR APPLICATION NUMBER: 09/432,768; SOFTWARE: PATENT NOWER: 220; SOFTWARE: PATENT NEW DATE: 1996-12-05; SOFTWARE: PATENT NEW DATE: 1998-12-05; SOFTWARE: PATENT NEW DATE: 1
  PRIOR FILING DATE: 1999-07-16
PRIOR APPLICATION NUMBER: US 08/938,365
PRIOR FILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 93
             PRIOR APPLICATION NUMBER: US 09/354,809
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US-09-908-599-2
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  US-09-908-599-2
   US-09-908-600-2
  RESULT 5
   RESULT 4
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   us-lu-144-410-4
; Sequence 2, Application US/10314410
; Publication No. US20030125540A1
; GENERAL INFORMATION:
    GENERAL INFORMATION:
    APPLICANT: Holtzman, Douglas A.
    APPLICANT: Holtzman, Douglas A.
    APPLICANT: Ban, Yang
    TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
    TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
    TITLE OF INVENTION: USES
    PRIOR FILING DATE: 2000-11-14
    PRIOR FILING DATE: 2001-01-10
    PRIOR FILING DATE: 1997-04-16
    PRIOR FILING DATE: 1997-04-16
    PRIOR FILING DATE: 1997-04-16
    PRIOR FILING DATE: 1997-04-16
   APPLICANT: HOLZAMAN, DOUGLAS A.

APPLICANT: Gearing, David P.

APPLICANT: Pan, Yang
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES
TOWNERY PRILING DATE: 2001-03-16
PRIOR PELLING DATE: 1997-04-16
PRIOR PELLING DATE: 1997-04-16
PRIOR PELLING DATE: 1997-04-16
PRIOR PELLING DATE: 1997-04-16
PRIOR FILING DATE: 1997-07-16
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PRIOR FILING DATE: 1999-07-16
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PRIOR FILING DATE: 1999-07-16
PRIOR FILING DATE: 1997-09-26
NUMBER OF SEQ ID NOS: 24
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   1; Indels
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Pred. No. 4e-38;
3; Mismatches
Sequence 2, Application US/09811088 Patent No. US20020160446A1
   GENERAL INFORMATION:
APPLICANT: Holtzman, Douglas A.
   Query Match 95.5%;
Best Local Similarity 94.2%;
Matches 65; Conservative
   ; ORGANISM: Homo saptens US-09-811-088-2
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61 KKLLHKLS 68
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  63 LHKLS 67
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  US-10-001-221A-7
   TYPE: PRT
  FEATURE:
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  Sequence 3, Application US/10001221A
Publication No. US20030108515A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert
APPLICANT: Sheng, Wei Premack, Brett Howard, Maureen
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN INMUNE RESPONSE
FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT APPLICATION NUMBER: 09/834,814
PRIOR PILING DATE: 2001-10-30
PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.1
SEQ ID NO 3
SEG ID NO 3
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  Gaps
  Length 93;
   DB 15; Length 68;
   Indels
   COMPUTER: IBM PC for a compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, Version #1.30
  Score 357; DB 10;
Pred. No. 1.7e-37;
   69.7%; Score 264; DB 15
ilarity 64.7%; Pred. No. 6e-26;
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  APPLICATION NUMBER: US/09/908,600
FILING DATE: 20-Jul-2001
CLASSIFICATION: <URNCON->
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/484,221
FILING DATE: <URNCOWN->
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, ANDERS A
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF177PP
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  TOPOLOGY: Innear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-600-2
  TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 aming acids
   MEDIUM TYPE: Floppy disk
   CURRENT APPLICATION DATA:
  94.28;
  COMPUTER READABLE FORM:
   64; Conservative
                  COUNTRY: 20850
  61 KMILNKLSQ 69
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   ; ORGANISM: Homo sapiens
US-10-001-221A-3
  Query Match
Best Local Similarity
   Query Match
Best Local Similarity
Matches 44; Conserv
  US-10-001-221A-3
   TYPE: PRT
   Matches
  RESULT
   g
   g
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  g
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```
GENERAL INFORMATION:

APPLICANT: Penn, Sharron G.

APPLICANT: Penn, Sharron G.

APPLICANT: Rank, David R.

APPLICANT: Hanzel, David R.

APPLICANT: Hanzel, David K.

TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

TILLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

TILLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

CURRENT FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-06-26

PRIOR FILING DATE: 2000-06-26

PRIOR PRIOR PRICATION NUMBER: US 60/236, 356

PRIOR FILING DATE: 2000-09-27

PRIOR FILING DATE: 2000-09-27

PRIOR FILING DATE: 2001-01-30

   APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert APPLICANT: Schall, Thomas J. Premack, Breet Howard, Maureen TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE FILE REFERENCE: 10709/14 CURRENT PELICATION NUMBER: US/10/001,221A CURRENT FILING DATE: 2001-10-30 PRIOR FILING DATE: 2001-40-20 NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin version 3.1 SEQ ID NO 7 LENGTH: 67
   9 DSV-----CCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI
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  Sequence 43730, Application US/09864761
Patent No. US20020048763A1
  CTHER INFORMATION: Chimeric molecule US-10-001-221A-7
Sequence 7, Application US/10001221A Publication No. US20030108515Al GENERAL INFORMATION:
  ORGANISM: Artificial sequence
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APPLICANT: MCDOBAID, John R.
APPLICANT: MCDOBAID, John R.
APPLICANT: MCDOBAID, Philip
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING SECONDARY TISSUE DAMACE
TITLE OF INVENTION: MTHER INFLAMMATORY CONDITIONS AND DISORDERS
FILE REFERENCE: 25020-601D
CURRENT PAPPLICATION NUMBER: US/09/792,793A
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 93
SOFTWARE: PALENTIN Ver. 2.0
ESCQ ID NO 28
LENGTH: 69
              4 GANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI 63
  APPLICANT: SIGNIA, Michael A.
APPLICANT: Wilken, Jill
APPLICANT: Wilken, Jill
APPLICANT: Wilken, Jill
APPLICANT: Wilken, Stephen B.H.
TITLE OF INVENTION: Modular Protein Libraries and Methods of Preparation
FILE REFERENCE: GRFN-02/01US
CURRENT APPLICATION NUMBER: US/09/144,838A
CURRENT FILING DATE: 1998-08-31
EARLIER APPLICATION NUMBER: US 60/057,620
EARLIER FILING DATE: 1997-09-04
NUMBER OF SEO ID NOS: 54
  12 CCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 67
  ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic US-09-144-838-3
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   ; OTHER INFORMATION: Human Chemokine Polypeptide: PARC (MIP-4) US-09-792-793A-28
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  Indels
  Query Match 40.4%; Score 153; DB 11; Best Local Similarity 42.2%; Pred. No. 5.5e-12; Matches 27; Conservative 14; Mismatches 21;
   Sequence 28, Application US/09792793A Patent No. US20020168370A1 GENERAL INFORMATION:
  Sequence 3, Application US/09144838A Patent No. US20020051996A1 GENERAL INFORMATION:
   ORGANISM: Artificial Sequence
   SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 3 LENGTH: 71
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61 WVRDSMKHLDQ 71
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  US-09-792-793A-28
  US-09-144-838-3
   q
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  APPLICANT: Schall, Thomas J. Talbot, Dale Berkowitz, Robert APPLICANT: Schall, Thomas J. Premack, Brett Howard, Maureen TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE FILE REFERENCE: 10709/14
CURRENT APPLICATION NUMBER: US/10/001,221A
CURRENT FILING DATE: 2001-10-30
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Pred. No. 8.4e-17;
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PRIOR APPLICATION NUMBER: PCT/USO1/00665
PRIOR FILING DATE: 2001-01-30
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PRIOR FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 7
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; GENERAL INFORMATION:
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61

64 LNKL 67

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APPLICANT: Ruben, Steven M.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polypeptides (As Ame
FILE REFERENCE: 1488.033000b
CURRENT APPLICATION NUMBER: US/09/334,923A
CURRENT FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: US 08/208,339
PRIOR PRIOR APPLICATION NUMBER: US 08/46,881
PRIOR APPLICATION NUMBER: US 08/446,881
PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR FILING DATE: 1995-06-06
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   GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PA104
CURRENT APPLICATION NUMBER: US/09/925,302
CURRENT FILING DATE: 2001-0810
PRIOR APPLICATION NUMBER: PCT/US00/05918
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 896
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  Sequence 65, Application US/09334923A Patent No. US20020061551A1 GENERAL INFORMATION:
  Sequence 792, Application US/09925302 Patent No. US20020044941A1
  PRIOR FILING DATE: 1995-06-06
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NUMBER OF SEQ ID NOS: 65
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90 ISDL 93
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   GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
APPLICANT: Ruben, Steven M.
APPLICANT: Li, Haadong
TTTLE OF INVENTION: Macrophage Inflammatory Protein-4 (MIP-4) Polynucleotides
TTTLE OF INVENTION: (As Amended)
FILE REFERENCE: 1488.033000C
CURRENT APPLICATION NUMBER: US/09/334,954A
CURRENT FILING DATE: 1999-06-17
CURRENT PELICATION NUMBER: US 08/46,881
PRIOR APPLICATION NUMBER: US 08/46,682
PRIOR APPLICATION NUMBER: US 08/465,682
PRIOR APPLICATION NUMBER: US 08/468,775
PRIOR PLING DATE: 1995-06-06
PRIOR PELING DATE: 1995-06-06
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PRIOR APPLICATION NUMBER: US 08/468,775
PRIOR FILING DATE: 1996-09-06
PRIOR APPLICATION NUMBER: US 08/468,775
PRIOR FILING DATE: 1996-09-06
PRIOR APPLICATION NUMBER: US 08/468,775
PRIOR FILING DATE: 1996-09-30
NUMBER OF SEQ ID NOS: 65
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   ; ORGANISM: Homo saptens
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Sequence Sequence

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Copyright (c) 1993 - 2003 Compugen Ltd.
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Maximum Match 100%
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Maximum DB seq length: 2000000000
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Perfect score:
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   Searched:
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Sequence 2, Applisequence 12, Applisequence 2, Applisequence 2007, Applisequence 2007, Applisequence 40, Applis

Sequence 2, Appli

ALIGNMENTS

Sequence

```
APPLICANT: Godiska, Ronald
APPLICANT: Godiska, Ronald
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE AND ASSAY TO IDENTIFY MODULATORS OF MDC
TITLE OF INVENTION: CHEMOKINE AND ASSAY TO IDENTIFY MODULATORS OF MDC
TITLE OF INVENTION: CHEMOKINE AND ASSAY TO IDENTIFY MODULATORS OF MDC
CORRESPONDENCE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Illinois
COUWRIY: Chicago
STATE: Illinois
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: PLOPPy disk
COMPUTER: DB PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/939,107
  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
   CLASSIFICATION:
  FILING DATE
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Sequence 32, Appl Sequence 32, Appl Sequence 32, Appl Sequence 32, Appl Sequence 32, Appl Sequence 1, Appli

US-08-939-107-32 US-09-067-447-32 US-09-067-447-32 US-09-067-447B-32 US-09-509-165A-32 US-60-412-866-1

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Sequence 32, Application US/09067447A

Sequence 32, Application US/09067447A

GENERAL INFORMATION:

APPLICANT: Godiska, Ronald

APPLICANT: Gray, Patrick W.

APPLICANT: Gray, Patrick W.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE

TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME

TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME

TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME

CURRENT FILING DATE: 1996-04-28

CURRENT FILING DATE: 1997-09-26

EARLIER PLICATION NUMBER: 08/939,107

EARLIER FILING DATE: 1996-06-07

EARLIER PLILING DATE: 1996-06-07

EARLIER PLILING DATE: 1996-06-07

EARLIER APPLICATION NUMBER: 08/558,658

EARLIER PLILING DATE: 1995-06-07

EARLIER APPLICATION NUMBER: 08/558,658

EARLIER PLILING DATE: 1995-06-07

SEARLIER PLILING DATE: 1995-06-07

NUMBER OF SEQ ID NOS: 44
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  ; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog 0S-09-067-447-32
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   Indels
   Indels
  Query Match 100.0%; Score 379; DB 14; Best Local Similarity 100.0%; Pred. No. 4.5e-41; Matches 69; Conservative 0; Mismatches 0;
   Query Match 100.0%; Score 379; DB 14; Best Local Similarity 100.0%; Pred. No. 4.5e-41; Matches 69; Conservative 0; Mismatches 0;
                     REFERENCE/DOCKET NUMBER: 2786
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
TELEFAX: 25-3856
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
REGISTRATION NUMBER: 38,153
   ORGANISM: Artificial Sequence
   SOFTWARE: Patentin Ver. 2.0
  LENGTH: 69 amino acids
TYPE: amino acid
STRANDEDNESS: single
  single
  TOPOLOGY: linear MOLECULE TYPE: peptide
   61 KMILNKLSQ 69
   61 KMILNKLSQ 69
  RESULT 3
US-09-067-447-32
  US-09-067-447-32
  RESULT
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  Sequence 32, Application US/09067447
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W
APPLICANT: Gray, Patrick W
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
   1 GPYGANMEDSVCCRDYNRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
   Gaps
  Query Match 100.0%; Score 379; DB 13; Length 69; Best Local Similarity 100.0%; Pred. No. 4.5e-41; Matches 69; Conservative 0; Mismatches 0; Indels
   3: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
   CITY: Chicago
STATE: 111nois
COUNTR: United States of America
CONTR: 111nois
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: BE PC compatible
COMPUTER: BE PC compatible
COMPUTER: SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447
          APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTONEY,FAGENT INFORMATION:
NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/33318
TELECHONE: 312/474-6300
TELEPHONE: 312/474-6300
  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY AGENT INFORMATION:
NAME: Gass, David A.
   JMBER: 08/558,658
16-NOV-1995
  TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 32:
   SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
  TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
  PRIOR APPLICATION DATA
APPLICATION NUMBER: (
FILING DATE: 16-NOV-1
  ; MOLECULE TYPE: peptide US-08-939-107-32
   61 KMILNKLSO 69
  CLASSIFICATION:
   FILING DATE
   ADDRESSEE:
  US-09-067-447-32
   STREET:
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TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC
TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF
FILE REPERENCE: 2786/5/4810
CURRENT APPLICATION NUMBER: US/09/509,165A
CURRENT FILING DATE: 2000-06-12
PRIOR APPLICATION NUMBER: US/09/67,447
PRIOR FILING DATE: 1998-04-28
PRIOR FILING DATE: 1998-04-28
PRIOR FILING DATE: 1997-09-26
PRIOR FILING DATE: 1997-09-26
PRIOR FILING DATE: 1997-06-07
PRIOR FILING DATE: 1996-06-07
PRIOR FILING DATE: 1996-06-07
PRIOR FILING DATE: 1995-11-16
PRIOR FILING DATE: 1995-06-07
PRIOR FILING DATE: 1995-06-07
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
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   ; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog US-09-509-165A-32
  Gaps
  Gaps
  ö
  ö
  Length 69;
  Length 69;
  Indels
  APPLICANT: Demotz et al.
TITLE OF INVENTION: BIOTINYLATED SYNTHETIC CHEMOKINES
TITLE REPERBNCE: 29964/38772
CURRENT APPLICATION NUMBER: US/60/412,866
CURRENT FILING DATE: 2002-09-23
NUMBER OF SEO ID NOS: 4
SOFTWARE: Patentin version 3.1
  Query Match 100.0%; Score 379; DB 19; Best Local Similarity 100.0%; Pred. No. 4.5e-41; Matches 69; Conservative 0; Mismatches 0;
  Score 362; DB 27;
Pred. No. 7.5e-39;
3; Mismatches 1;
  Sequence 30, Application US/08939107
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
  Sequence 1, Application US/60412866 GENERAL INFORMATION:
   95.5%;
  ORGANISM: Artificial Sequence
   NUMBER OF SEQ ID NOS: 46
SOFTWARE: Patentin Ver. 2.0
   Query Match
Best Local Similarity 94.2
Matches 65; Conservative
  61 KMILNKLSQ 69
   ORGANISM: Homo sapièns
  61 KMILNKLSQ 69
   61 KMILNKLSQ 69
   RESULT 6
US-60-412-866-1 ·
   US-08-939-107-30
   US-60-412-866-1
   SEQ ID NO 32
LENGTH: 69
  LENGTH: 69
  TYPE: PRT
   TYPE: PRT
  SEQ ID NO 1
   RESULT 7
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  οy
   APPLICANT: Gray, Patrick W.

APPLICANT: Chantry, David H.

APPLICANT: Deeley, Michael H.

APPLICANT: Deeley, Michael B.

TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND

TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC

TITLE OF INVENTION: ACTIVITY

NUMBER OF SEQUENCES: 40

CORRESPONDENCE ADDRESS:
  ö
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   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
  ;
0
   Length 69;
  ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
  Indels
  STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN RELEASE #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/067,447B
  100.0%; Score 379; DB 14;
100.0%; Pred. No. 4.5e-41;
iive 0; Mismatches 0;
  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/66,542
FILING DATE: 7-UN-1996
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
RESTREMENCE/DOCKET NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
                            Sequence 32, Application US/09067447B GENERAL INFORMATION: APPLICANT; Gray, Patrick W.
  US-09-509-165A-32; Sequence 32, Application US/09509165A; GENERAL INFORMATION:
  REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION:
  TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 amino acids
   69; Conservative
   312/474-0448
   STRANDEDNESS: single
   TOPOLOGY: linear
MOLECULE TYPE: peptide
  61 KMILNKLSQ 69
  APPLICANT: Gray et al
  Query Match
Best Local Similarity
Matches 69; Conserv
  CLASSIFICATION:
   Chicago
   FILING DATE
  TELEPHONE:
  US-09-067-447B-32
         US-09-067-447B-32
   TELEFAX:
   RESULT 5
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Sequence 30, Application US/09067447A
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), AND CHEMOKINE
TITLE OF INVENTION: ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC ACTIVITY
TITLE OF INVENTION: AND THERAPEUTIC USES FOR SAME
FILE REFERENCE: 27866/34404
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
  2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV
  Length 70;
   Indels
  SOFTWARE: Patentin Release #1.0, Version #1.30
   Query Match 95.5%; Score 362; DB 14; Best Local Similarity 94.2%; Pred. No. 7.6e-39; Matches 65; Conservative 3; Mismatches 1;
  CURRENT APPLICATION NUMBER: US/09/067,447A CURRENT FILING DATE: 1998-04-28 EARLIER APPLICATION NUMBER: 08/939,107 EARLIER FILING DATE: 1997-09-26 EARLIER FILING DATE: 1997-06-05 EARLIER APPLICATION NUMBER: 08/660,542 EARLIER APPLICATION NUMBER: 08/58,658 EARLIER FILING DATE: 1995-1116
   NAME: Gass, David A.
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
   FILING DATE:
CLASSIFICATION
PRIOR APPLICATION
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 08/939,107
PRIOR APPLICATION NUMBER: 08/60,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION NUMBER: 08/58,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/58,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
   APPLICATION NUMBER: 08/479,620
   APPLICATION NUMBER: US/09/067,447
   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
   EARLIER APPLICATION NUMBER: 08/
EARLIER FILING DATE: 1995-06-07
  TELERAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO.
SEQUENCE CHARACTERISTICS:
LENGTH: 70 aming acids
  ; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-067-447-30
  STRANDEDNESS: single
                               COMPUTER READABLE FORM:
   61 KMILNKLSQ 69
  amino acid
   US-09-067-447-30
  ò
   qq
  ò
APPLICANT: Gray, Patrick W.
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT
CORRESPONDENCES: 40
CORRESPONDENCE ADDRESS:
   Sequence 30, Application US/09067447
GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W
APPLICANT: Gray, Patrick W
APPLICANT: Raport, Carol J.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSSAY TO IDENTIFY MODULATORS OF MDC ACT
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
   2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
   Length 70;
   E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
  1; Indels
   STATE: Illinois
COUNTRY: United States of America
ZIP: 66060-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/939,107
  3: Marshall, O'Toole, Gerstein, Murray &
6300 Sears Tower, 233 South Wacker Drive
  Score 362; DB 13;
Pred. No. 7.6e-39;
  3; Mismatches
   27866/33318
   Illinois
United States of America
  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: GASS, DAVIG A:
REGISTRATION NUMBER: 38,153
REFERENCE/DOCKET NUMBER: 27866/337
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
  Query Match 95.5%;
Best Local Similarity 94.2%;
Matches 65; Conservative
  TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
  SEQUENCE CHARACTERISTICS:
LENGTH: 70 amino acids
  TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
   MOLECULE TYPE: peptide
  61 KMILNKLSQ 69
   STREET: bocc
  CLASSIFICATION:
   Chicago
   FILING DATE
   ADDRESSEE:
  ADDRESSEE:
   RESULT 8
US-09-067-447-30
  US-08-939-107-30
  COUNTRY:
   STREET:
  CITY: (STATE:
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TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE (MDC), MDC ANALOGS, MDC TITLE OF INVENTION: INHIBITOR SUBSTANCES, AND USES THEREOF FILE REFERENCE: 27866/34810

CURRENT FILING DATE: 2000-06-12

PRIOR PELLOATION NUMBER: 09/067,447

PRIOR FILING DATE: 1998-04-28

PRIOR PELLOATION NUMBER: 08/939,107

PRIOR PELLING DATE: 1997-09-26

PRIOR PELLING DATE: 1996-06-07

PRIOR PELLING DATE: 1996-06-07

PRIOR PELLING DATE: 1995-11-16

PRIOR PELLING DATE: 1995-11-16

PRIOR FILING DATE: 1995-06-07

PRIOR FILING DATE: 1995-06-07

PRIOR PELLING DATE: 1995-06-07

PRIOR FILING DATE: 1995-06-07

PRIOR FILING DATE: 1995-06-07

PRIOR PELLING DATE: 1995-06-07

PRIOR FILING DATE: 1995-06-07

SOFTWARE: PARENTIN VOET: 2.0
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  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV
  Gaps
   Gaps
  ö
  APPLICANT: Gorman, Daniel M.
APPLICANT: Hedrick, Joseph A.
APPLICANT: 2lotnik, Albert
TITLE OF INVENTION: MAMMALIAN CHEMOKINES; RELATED REAGENTS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSE: DNAX Research Institute
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  Query Match 95.5%; Score 362; DB 19;
Best Local Similarity 94.2%; Pred. No. 7.6e-39;
Matches 65; Conservative 3; Mismatches 1;
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Pred. No. 7.6e-39;
3; Mismatches 1;
   5-09-509-165A-30
Sequence 30, Application US/09509165A
GENERAL INFORMATION:
  Sequence 10, Application US/08925857 GENERAL INFORMATION:
  ORGANISM: Artificial Sequence
   95.5%;
   Query Match
Best Local Similarity 94.2'
Matches 65; Conservative
                   STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-067-447B-30
   61 KMILNKLSQ 69
  61 KMILNKLSQ 69
   HIIIIIII
KMILNKLSQ 70
  amino acid
  RESULT 12
US-08-925-857-10
   SEQ ID NO 30
LENGTH: 70
   TYPE: PRT
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   TITLE OF INVENTION: MACKORHAGE DERIVED CHEMOKINE (MDC) AND
TITLE OF INVENTION: CHEMOKINE ANALOGS AND ASSAY TO IDENTIFY MODULATORS OF MDC
TITLE OF INVENTION: ACTIVITY
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
   ö
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
  2 GPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 61
   ; OTHER INFORMATION: Description of Artificial Sequence: Human MDC analog US-09-067-447-30
   Gaps
   Length 70;
  5: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
   1; Indels
  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
   Score 362; DB 14;
Pred. No. 7.6e-39;
3; Mismatches 1;
   REFERENCE/DOCKET NUMBER: 27866/34404
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
  APPLICATION NUMBER: US/09/067,447B
  COUNTRY: United States of America ZIP: 60606-6402
   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/939,107
FILING DATE: 26-SEPT-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,542
FILING DATE: 7-JUN-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/558,658
FILING DATE: 16-NOV-1995
PRIOR APPLICATION NUMBER: 08/479,620
FILING DATE: 07-JUN-1995
ATTING DATE: 07-JUN-1995
ATTING DATE: 10-NOV-1995
  Sequence 30, Application US/09067447B GENERAL INFORMATION: APPLICANT: Gray, Patrick W.
  38,153
  Gray, Patrick W.
Chantry, David H.
Deeley, Michael C
   ORGANISM: Artificial Sequence
   Query Match 95.5%;
Best Local Similarity 94.2%;
Matches 65; Conservative
                     Patentin Ver. 2.0
   CURRENT APPLICATION DATA:
  TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
  312/474-0448
  NAME: Gass, David A. REGISTRATION NUMBER:
NUMBER OF SEQ ID NOS: 44
   61 KMILNKLSQ 69
  KMILNKLSQ 70
  Illinois
  CLASSIFICATION:
   CITY: Chicago
STATE: Illinoi
  ADDRESSEE:
  SOFTWARE: Par
  TELEFAX:
   STREET:
   TYPE: PRT
   FEATURE:
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: 93 AMINO ACIDS
AMINO ACID
  SEQUENCE CHARACTERISTICS
  TOPOLOGY: LINEAR MOLECULE TYPE: PROTEIN
   61 KMILNKLSQ 69
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   STRANDEDNESS:
  RESULT 15
US-08-479-620-2
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  US-08-464-594-2
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   ;
   Length 86;
   Sequence 6, Application PC/TUS0000953
GENERAL INFORMATION:
APPLICANT: Butcher, Eugene
APPLICANT: Campbell, James
APPLICANT: Rottman, James
APPLICANT: Rottman, James
APPLICANT: Wu, Lijan
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR AND ITS LIGAND
TITLE OF INVENTION: CC CHEMOKINE RECEPTOR HOMING
FILE REFERENCE: SUN-110PRV
CURRENT APPLICATION NUMBER: PCT/US00/00953
CURRENT FILING DATE: 2000-01-14
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 3.0
   Score 362; DB 1; Length 93;
Pred. No. 1.1e-38;
3; Mismatches 1; Indels
   Indels
   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
SOFTWARE: PATENTIN DATA:
APPLICATION NUMBER: US/08/925,857
FILING DATE: 09-SEP-1997
CLASSFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/025,724
FILING DATE: 10-SEP-1996
ATTORNEY AGENT INFORMATION:
NAME: Ching, Edwin P.
RESISTRATION NUMBER: 34,090
RESISTRATION NUMBER: 34,090
   Score 362; DB 13;
Pred. No. 9.6e-39;
3; Mismatches 1;
   REFERENCE/DOCKET NUMBER: DX0614K
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-852-9196
901 California Avenue
  TELEFAX: 650-496-1200
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 86 amino acids
  95.5%;
   Query Match 95.5%;
Best Local Similarity 94.2%;
Matches 65; Conservative
   Query Match
Best Local Similarity 94.2'
Matches 65; Conservative
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   ; MOLECULE TYPE: protein US-08-925-857-10
   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
  TYPE: PRT
CORGANISM: Homo sapiens
PCT-US00-00953-6
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78 KMILNKLSQ 86
                                    California
   TYPE: amino acid
TOPOLOGY: linear
  94304-1104
                   Palo Alto
   USA
   PCT-US00-00953-6
   COUNTRY:
  SEQ ID NO 6
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  Gaps
   APPLICANT: GGGGSGA, Ronald
APPLICANT: GGGGS, Pattick W.
TITLE OF INVENTION: MACROPHAGE DERIVED CHEMOKINE
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
CARRESPONDENCE ADDRESS:
AMASSALI, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
   Length 93;
  1; Indels
   Score 362; DB 8;
Pred. No. 1.1e-38;
  ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
ADDRESSEE: CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
CITY: ROSELAND
COUNTRY: USA
   APPLICANT: LI, ET AL.
TITLE OF INVENTION: Human Chemokine Beta-13
TUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
  3; Mismatches
   OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,594
FILING DATE: June 5, 1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
   Sequence 2, Application US/08479620 GENERAL INFORMATION:
Sequence 2, Application US/08464594 GENERAL INFORMATION:
   NAME: FERRARO, GREGORY D. RECISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 32
TELECOMMUNICATION INFORMATION:
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  TELEFAX: 201-994-1744 INFORMATION FOR SEQ ID NO: 2:
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Matches 65; Conservative
   FILING DATE: ATTORNEY/AGENT INFORMATION:
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COUNTRY: United States of America
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NAME: Gass, David A.
REGISTRATION NUMBER: 18,153
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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| Result |       | Query  |                 |    |                    |                   |
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| ٣      | 362   | 95.5   | 93              | 7  | PCT-US02-35606-146 | 146,              |
| 4      | 362   | 95.5   | 93              | N  | PCT-US02-40891-473 | Sequence 473, App |
| S      | 362   | 95.5   | 93              | 7  | PCT-US02-40891-549 |                   |
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|                     | Sednence 333, App | Sequence 2, Appli  | Seguence 2, Appli | 2, A               | Sequence 422, App |      |      | Sequence 423, App    | Sequence 425, App | Sequence 3, Appl1  | Sequence 3, Appli   | ۲,                 | Sequence 7, Appli   | Sequence 6, Appli  | Sequence 6, Appli   | Sequence 28, Appl    | 46,                  | _                    | Sequence 562, App    | Sequence 564, App | 265,                 | Sequence 566, App    | Sequence 567, App    | Sequence 6, Appli   | Sequence 2964, Ap     |
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| 587                 | 8/9               | 93                 | 93                | .63                | 677               | 678  | 9/9  | 677                  | 9/9               | 9                  | 68                  | 29                 | 29                  | 77                 | 78                  | 69                   | 88                   | 83                   | 83                   | 83                | 83                   | 88                   | 88                   | 88                  | 89                    |
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## ALIGNMENTS

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APPLICANT: Devico, Anthony L.
APPLICANT: Devico, Anthony L.
APPLICANT: Devico, Robert C.
APPLICANT: Callo, Robert C.
APPLICANT: Markham, Phillip D.
APPLICANT: Markham, Phillip D.
APPLICANT: Garzino-Demo, Alfredo
TITLE OF INVENTION: Treatment and Prevention of Lentivirus Infection
FILE REFERENCE: 00784 SRP
CURRENT APPLICATION NUMBER: US/10/341,931
CURRENT FILING DATE: 2003-01-14
PRIOR FILING DATE: 1997-09-16
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PRIOR FILING DATE: 2001-12-21
PRIOR FILING DATE: 2001-02-88
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APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: 41 Human Secreted Proteins
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CURRENT FILING DATE: 2002-11-06
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PRIOR APPLICATION NUMBER: 60/414,984
PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR APPLICATION NUMBER: 60/420,246
PRIOR APPLICATION NUMBER: 60/423,623
PRIOR APPLICATION NUMBER: 60/433,633
PRIOR APPLICATION NUMBER: 60/433,633
PRIOR FILING DATE: 2002-11-05
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  PCT-US02-40891-640; Sequence 640, Application PC/TUS0240891; GENERAL INFORMATION:
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   Patentin Ver. 2.0
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  SUBJECT INTURNATION:
SUBJECT AND GENOME SCIENCES, INC.
TILLE OF INVENTION: Albumin Fusion Proteins
TILLE OF INVENTION: Albumin Fusion Proteins
FILE REFERENCE: PF5646PT:
CURRENT APPLICATION NUMBER: 60/341,811
PRIOR PELICATION NUMBER: 60/341,811
PRIOR FILING DATE: 2001-12-23
PRIOR APPLICATION NUMBER: 60/348,900
PRIOR FILING DATE: 2002-05-18
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PRIOR FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR APPLICATION NUMBER: 60/417,611
PRIOR PILING DATE: 2002-10-11
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PRIOR FILING DATE: 2002-11-28
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SOFTWARE: Patentin Ver. 2.0
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Pred. No. 1.9e-40;
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  PCT-US02-40891-640
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PCT-US02-40891-641
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LENGTH: 93
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Sequence 2. Application US/10314410
Sequence 2. Application US/10314410
Sequence 2. Application US/10314410
Sequence 2. Application Sequence 3. Sequen
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Pred. No. 1.9e-40;
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Pred. No. 1.9e-40;
   Sequence 5105, Application US/10405027
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Human Secreted Proteins
FILE REFERENCE: PS806P1
CURRENT APPLICATION NUMBER: US/10/405,027
CURRENT FILING DATE: 2003-04-07
PRIOR FILING DATE: 2002-04-04
PRIOR FILING DATE: 2002-04-30
PRIOR FILING DATE: 2002-04-30
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94.2%;
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US-10-405-027-5105
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US-10-314-410-2
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Best Local Similarity
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84

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TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLOO1455
CURRENT APPLICATION NUMBER: US/60/455,444
CURRENT FILING DATE: 2003-03-18
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   APPLICANT: LUKE, MAY
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: STENOSIS, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLOOL457
CURRENT APPLICATION NUMBER: US/60/453,050
CURRENT FILING DATE: 2003-03-10
NUMBER OF SEQ ID NOS: 82762
SOFTWARE: FastsEQ for Windows Version 4.0
SEQ ID NO 8659
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Pred. No. 1.9e-40;
3; Mismatches 1;
   Sequence 8659, Application US/60453050 GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
   Sequence 4765, Application US/60455444 GENERAL INPORMATION:
APPLICANT: CARGILL, Michele APPLICANT: BEGOVICH, An
   Query Match 95.5%;
Best Local Similarity 94.2%;
Matches 65; Conservative
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US-60-453-050-8659
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  SEQ ID NO 4765
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   Sequence 2. Application US/10445790

Sequence 2. Application US/10445790

GENERAL INFORMATION:

APPLICANT: Devico, Anthony L.

APPLICANT: Garzino, Alfedo

TITLE OF INVENTION: Immuno-Modulating Effects of Chemokines in DNA Vaccination
FILE REFERENCE: 4115-109 CIP DIV

CURRENT APPLICATION NUMBER: US/10/445,790

CURRENT FILING DATE: 2003-65-27

PRIOR FLILNG DATE: 1998-12-11

PRIOR FLILNG DATE: 2000-12-06

PRIOR FLILNG DATE: 1997-12-11

NUMBER OF SEQ ID NOS: 7

SOFTWARE: PatentIn version 3.1

SEQ ID NO 2

LENGTH: 93
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GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: TAKOUBOVA, Olga
APPLICANT: ANGUENCY, Olga
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
TITLE OF INVENTION: MYCCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REPERENCE: CL001456
CURRENT APPLICATION UNBER: US/60/453,135
CURRENT APPLICATION UNBER: US/60/453,135
CURRENT FILING DATE: 2003-03-10
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Conservative
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ORGANISM: Homo sapiens
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Matches 65
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ORGANISM:
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Search completed: July 28, 2003, 04:18:50 Job time: 24.3529 secs

us-09-509-165a-32.rapn

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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July 28, 2003, 04:01:18; Search time 6.81303 Seconds Run on:

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US-09-509-165A-32
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Scoring table:

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Searched:

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Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

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3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

|               |       | de             |        |    | SUMMARIES |                      |
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| 27            | 88.5  | 23.4           | 120    | 7  | JE0177    | lymphocyte and mon   |
| 28            | 86.5  | 22.8           | 92     | ~  | S24236    | TCA3 protein - mou   |
| 29            | 84.5  | 22.3           | 125    | 7  | 146857    | monocyte chemoattr   |

| monocytic cytokine<br>lymphotactin precu | monocyte chemotact<br>granulocyte chemot | neutrophil-activat<br>transformation-ind | RSV-induced protei<br>C-X-C chemokine LI | platelet basic pro | interleukin-8 - do<br>probable dutathio | hypothetical prote | carboxy-terminal p<br>pre-B-cell growth- | Interteuxin's nomo |
|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|--------------------|-----------------------------------------|--------------------|------------------------------------------|--------------------|
| A48093<br>ETMSL                          | A55984<br>A54188                         | A55010<br>A26736                         | I50417<br>A57325                         | S42881             | JN0841                                  | T05980             | JH0263<br>A53497                         | 123410             |
| 1 2                                      | 0 0                                      | 7 (7                                     | 77                                       | 7 0                | 9 77 7                                  | 000                | 7 77 7                                   | 7                  |
| 97                                       | 72                                       | 103                                      | 103                                      | 119                | 95                                      | 430                | 0<br>0<br>0<br>0<br>0                    | ä                  |
| 21.6                                     | 19.7                                     | 18.5                                     | 18.3                                     | 17.9               | 17.4                                    | 17.0               | 16.9                                     | T 0 . 7            |
| 82<br>80                                 | 74.5                                     | /0<br>69.5                               | 69.5<br>69                               | 68                 | 66                                      | 64.5               | 64 .5<br>64                              | 94                 |
| 30<br>31                                 | 335                                      | 35                                       | 36                                       | 38                 | 40                                      | 42                 | 44.                                      | <b>4</b>           |

### ALIGNMENTS

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| macrophage inflammatory protein-lalpha - rat C;Species: Rattus norvegicus (Norway rat) C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 16-Jul-1999 C;Accession: 152322 R;Shl, M.M.; Godleski, J.J.; Paulauskis, J.D. Biochem. Biophys. Res. Commun. 211, 289-295, 1995 A;Title: Molecular cloning and posttranscriptional regulation of macrophage infla A;Reference number: 152322; MUID:95298037; PMID:7779098 A;Accession: 152322; MUID:95298037; PMID:7779098 A;Accession: 152322; MUID:95298037; PMID:7779098 A;Molecula type: mRNA A;Molecula type: mRNA A;Molecula type: mRNA A;Residues: 1-92 < RES. A;Cross-references: EMBL:U22414; NID:9790632; PIDN:AA80608.1; PID:9790633 C;Superfamily: macrophage inflammatory protein Query Match Best Local Similarity 42.4%; Pred. No. 2.5e-11; Matches 28; Conservative 16; Mismatches 20; Indels 2; Gaps 2; Cy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | macrophage inflammatory protein-lalpha - rat C;Species: Rattus norvegicus (Norway rat) C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 16-Jul-1999 C;Accession: 152322 R;Shl, M.M.; Godleski, J.J.; Paulauskis, J.D. Bjochem. Biophys. Res. Commun. 211, 289-295, 1995 A;Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat A;Reference number: 152322; MUID:95298037; PMID:7779098                 |
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| C; Accession: 12322 Biochen. Biophys. Res. Commun. 211, 289-295, 1995 Biochen. Biophys. Res. Commun. 211, 289-295, 1995 A; Title: Molecular cloning and posttranscriptional regulation of macrophage infla A; Reference number: 152322; MUID:95298037; PMID:7779098 A; Reference number: 152322 A; Status: preliminary; translated from GB/EMBL/DDBJ A; Molecule type: mRNA A; Residues: 1-92 < RES> A; Cross-references: EMBL:U22414; NID:9790632; PIDN:AAA80608.1; PID:9790633 A; Cross-references: EMBL:U22414; NID:9790632; PIDN:AAA80608.1; PID:9790633 C; Superfamily: macrophage inflammatory protein Query Match Best Local Similarity 42.4%; Pred. No. 2.5e-11; Matches 28; Conservative 16; Mismatches 20; Indels 2; Gaps 2; AptendEDSYCCRDYMPRIPLENVENFETADYFETSELCSQPECVLLFRENERICADPRETWWW 61 LIII: III: III: IIII: IIIIIIIIIIIIIIIII                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | C, Accession: 152322<br>R;Shl, M.M.; Godleski, J.J.; Paulauskis, J.D.<br>Biochem. Biophys. Res. Commun. 211, 289-295, 1995<br>A;Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat<br>A;Reference number: 152322; MUID:95298037; PMID:7779098<br>A;Accession: 152322                                                                                                                                                |
| R;Shi, M.W.; Godleski, J.J.; Panlauskis, J.D. Biochem. Biophys. Res. Commun. 211, 289-295. A;Title: Molecular cloning and posttranscriptional regulation of macrophage infla A;Reference number: 152322; MUID:95298037; PMID:7779098 A;Reference number: 152322; MUID:95298037; PMID:7779098 A;Accession: 152322; MUID:95298037; PMID:7779098 A;Accession: 152322; MUID:95298037; PMID:7779098 A;Accession: 152322; MUID:95298037; PMID:7779098 A;Molecula type: mRNA A;Residues: 1-92 < RES. A;Cross-references: EMBL:U22414; NID:9790632; PIDN:AAA80608.1; PID:9790633 A;Cross-references: EMBL:U22414; NID:9790632; PIDN:AAA80608.1; PID:9790633 C;Superfamily: macrophage inflammatory protein Query Match Best Local Similarity 42.4%; Pred. No. 2.5e-11; Matches 28; Conservative 16; Mismatches 20; Indels 2; Gaps 2; Aprill:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | R;Shi, M.M.; Godleski, J.J.; Paulauskis, J.D. Biochem. Biophys. Res. Commun. 211; 289-295, 1995 A;Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat A;Reference number: I52322; MUID:95298037; PMID:7779098 A;Accession: I52322                                                                                                                                                                                    |
| Biochem. Blophys. Res. Commun. 211, 289-285, 1995 A;Title: Molecular cloning and posttranscriptional regulation of macrophage infla A;Reference number: 15232; MUID:95298037; PMID:779998 A;Accession: 152322 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: mRNA A;Residues: 1-92 <res> A;Cross-references: EMBL:U22414; NID:9790632; PIDN:AA80608.1; PID:9790633 C;Superfamily: macrophage inflammatory protein Cuery Match Best Local Similarity 42.4%; Pred. No. 2.5e-11; Matches 28; Conservative 16; Mismatches 20; Indels 2; Gaps 2; Cy /res>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Biochem. Blophys. Res. Commun. 211, 289-295, 1995 A;Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat A;Reference number: I52322; MUID:95298037; PMID:7779098 A;Accession: I52322                                                                                                                                                                                                                                  |
| A; Title: Molecular cloning and posttranscriptional regulation of macrophage infla A; Reference number: I52322; MUID:95298037; PMID:7779098 A; Reference number: I52322; MUID:95298037; PMID:7779098 A; Status: preliminary; translated from GB/EMBL/DDBJ A; Molecule type: mRNA A; Molecule type: mRNA A; Residues: 1-92 < RES> A; Cross-references: EMBL:U22414; NID:9790632; PIDN:AAA80608.1; PID:9790633 C; Superfamily: macrophage inflammatory protein  Query Match A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A;Title: Molecular cloning and posttranscriptional regulation of macrophage inflammat A;Reference number: 152322; MUID:95298037; PMID:7779098<br>A;Accession: 152322                                                                                                                                                                                                                                                                                 |
| A; Reference number: 152322; MUID:95298037; PMID:7779098 A; Accession: 152322; MUID:95298037; PMID:7779098 A; Accession: 152322; MUID:95298037; PMID:779098 A; Accession: 152322; MUID:95298037; PMID:779098 A; Molecule type: mRNA A; Molecule type: mRNA A; Molecule type: mRNA A; Residues: 1-92 - KES> A; Cross-references: EMBL:U22414; NID:9790632; PIDN:AAA80608.1; PID:9790633 C; Superfamily: macrophage inflammatory protein Query Match Best Local Similarity 42.4%; Pred. No. 2.5e-11; Matches 28; Conservative 16; Mismatches 20; Indels 2; Gaps 2; Qy 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYTYSDSCPREGVLLTRRNKBICADDRRVPWWK 61                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | A;Reference number: 152322; MUID:95298037; PMID:7779098<br>A;Accession: 152322                                                                                                                                                                                                                                                                                                                                                                       |
| 1608.1; PID:g790633 19th 92; Indels 2; Gaps LLTFRDKEICADPRVPWVK 61                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A; Accession: 152322                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <pre>Lranslated from GB/EMBL/DDBJ BL:U22414; NID:g790632; PIDN:AAAB0608.1; PID:g790633 age inflammatory protein     40.1%; Score 152; DB 2; Length 92;     42.4%; Pred. No. 2.5e-11; cvative 16; Mismatches 20; Indels 2; Gaps svCCRDYRYRLPLRVVKEYPTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61;                                      </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| ### 31.022414; NID:9790632; PIDN:AAA80608.1; PID:9790633  ##################################                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A;Status: preliminary; translated from GB/EMBL/DDBJ                                                                                                                                                                                                                                                                                                                                                                                                  |
| 31: U22414; NID: 9790632; PIDN: AAAB0608.1; PID: 9790633   40.18; Score 152; DB 2; Length 92;   42.48; Pred. No. 2.5e-11; Indels 2; Gaps   vctive 16; Mismatches 20; Indels 2; Gaps   vccryvryrexperstsscoppgyvLLTFRDKEICADPRVPWVK 61:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | A; Molecule type: mRNA                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 61                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A; Residues: 1-92 < RES>                                                                                                                                                                                                                                                                                                                                                                                                                             |
| OB 2; Length 92;<br>5e-11;<br>5 20; Indels 2; Gaps<br>DSCPRPGVVLTFRDKEICADPRVPWVK 61<br>1 1  :     :::    :   :<br>SLCSQPGVIFLTKRNRQICADPKETWVQ 82                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A; Cross-references: EMBL: U22414; NID: 9790632; PIDN: AAAB0608.1; PID: 9790633                                                                                                                                                                                                                                                                                                                                                                      |
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| Best Local Similarity 42.4%; Pred. No. 2.5e-11; Matches 28; Conservative 16; Mismatches 20; Indels 2; Gaps 2 PYGANWEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Ouerv Match 40 1%: Score 152: DB 2: Length 92:                                                                                                                                                                                                                                                                                                                                                                                                       |
| <pre>Matches 28; Conservative 16; Mismatches 20; Indels 2; Gaps 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61     : :       ::  ::         :                                       </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2; Gaps                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| : :       :: : ::         ::                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK                                                                                                                                                                                                                                                                                                                                                                                       |
| 25.PYGAD-TPTACCFSYGR-QIPRKFIADYFETSSLCSQPGVIFLTKRNRQICADPKETWVQ<br>62 MILNKL 67<br>::{                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 25. PYGAD-TPTACCFSYGR-QIPRKFIADYFETSSLCSQPGVIFLTKRNRQICADPKETWVQ                                                                                                                                                                                                                                                                                                                                                                                     |
| •••                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Db 83 EYITEL 88                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

Miniocyte chemoattractant cytokine RANTES precursor - human
NyAlternate names: small inducible cytokine A5; T-cell specific cytokine RANTES
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 30-Jun-1989 #sequence\_revision 16-Aug-1996 #text\_change 29-May-1998
C;Accession: A28815
R;Schall, T.J.; Jongstra, J.; Dyer, B.J.; Jorgensen, J.; Clayberger, C.; Davis, M.M;
J. Immunol. 141, 1018-1025, 1988
A;Title: A human T cell-specific molecule is a member of a new gene family.
A;Reference number: A28815; MUID:88285659; PMID:2456327

A; Molecule type: mRNA A; Residues: 1-91 <SCH>

A;Cross-references: GB:M21121 C;Comment: The acronym RANTES reflects the description "Regulated upon Activation, No

C; Genetics:

A;Gene: GDB:SCYA5; D17S136E
A;Cross-references: GDB:120749; OMIM:187011
A;Cross-references: GDB:120749; CMIM:187011
C;Superfamily: macrophage inflammatory protein
C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation; T-cell

IJ

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A.Cross-references: GB.J04491; NID:g201524; PIDN:AAA40304.1; PID:g201525
R:Davatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos, T. Expavatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos, T. Expavatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos, T. Title: Cloning and characterization of a cDNA for murine macrophage inflammatory T. A; Reference number: S04533; MUID:88258380; PMID:3290382
A; Reference number: S04533
A; Molecule type: mRNA
A; Residues: 1-48, E', S0-90, I', 92 < CDA2>
A; Cross-references: ENBL:X12531
A; Note: the authors translated the codon GAG for residue 49 as Asp and ATT for resit un A; Note: the sequence has been corrected in reference A53865
B; Davatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.; Luedke, C.; Gallegos, I. S., Eference number: A53885
A; Reference number: A53885
A; Contents: erratum
  A; Wolecule type: DNA
A; Residues: 1-92 <GROD
A; Residues: 1-92 <GROD
A; Cossor references: EMBL:X53372; NID:954062; PIDN:CAA37452.1; PID:9297531
A; Crossor references: EMBL:X53372; NID:954062; PIDN:CAA37452.1; PID:9297531
A; Note: the authors' translation of the nucleotide sequence differs at several positil R; Kwon, B.S.; Weissman, S.M.
Proc. Natl. Acad. Sci. U.S.A. 86, 1963-1967, 1989
A; Tille: cDNA sequence of two inducible T-cell genes.
A; Reference number: A32393; MUID:89184547; PMID:2784565
  A; Molecule type: mRNA
A; Residues: 1-21, 'L', 23-61,'A', 63-92 <BRO>
A; Cross-references: GB:M23447; NID:9533240; PIDN:AAA40146.1; PID:9533241
A; Cross-references: GB:M23447; NID:9533240; PIDN:AAA40146.1; PID:9533241
B; Sherry, B.; Tekamp-olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.
J. Exp. Med. 168, 2251-2259, 1988
A; Title: Resolution of the two components of macrophage inflammatory protein 1, and charactering number: JL0088; MUID:89067830; PMID:3058856
   C; Species: Mus musculus (house mouse)
C; Date: 17-ul-1992 #sequence_revision 17-ul-1992 #text_change 16-ul-1999
C; Accession: S11685; A32393; S04533; A53885; A30552; PS0303; A27596; I56104
R; Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.
Nucleic Acids Res. 18, 5561, 1990
A; Title: Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammæt A; Reference number: S11685; MuID:91016858; PMID:2216738
  A;Cross-references: EMBL:X12531; NID:953122; PIDN:CAA31047.1; PID:953123
R;Brown, K.D; Zurawaki, S.M.; Mosmann, T.R.; Zurawaki, G.
J. Immunol. 142, 679-687, 1989
A;Title: A family of small inducible proteins secreted by leukocytes are members of—a
   Title: Macrophages secrete a novel heparin-binding protein with inflammatory and Reference number: A27596; MUID:88154745; PMID:3279154 Accession: A27596
   acrophage inflammatory protein-1-alpha precursor - mouse
Alternate names: heparin-binding chemotaxis protein; L2G25B protein; SCI/MIP-la;
  Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.;
            25 PYGS--DITPCCFAYLSLALPRAHVKEYFYTSSKCSNLAVVFVTRRNRQVCANPEKKWVQ 82
  s of various activation processes. A; Reference number: A30552; MUID:89093958; PMID:2521353
  A; Residues: 24-33, XXX, 36-54 <SHE>
R; Wolpe, S.D.; Davatelis, G.; Sherr
J. Exp. Med. 167, 570-581, 1988
  A; Molecule type: protein
A; Residues: 24-33, 'XX', 36-42 <WOL>
   83 EYINYL 88
   macrophage inflammatory
  62 MILNKL 67
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   A; Accession: A53885
   A; Accession: A30552
   Accession: PS0303
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   g
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A; Residues: 1-18, 'A', 20-91 <SCH>
A; Residues: 1-18, 'A', 20-91 <SCH
A; Residues: 1-18, 'A', 20-91 <SCH
A; Reperimental source: macrophage cell line PU5-1.8
A; Note: sequence extracted from NCBI backbone (NCBIN:106768, NCBIP:106770)
A; Siln, H.S., Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.
Mol. Cell, Biol. 14, 2914-2925, 1994
A; Title: Definition of a lipopolysaccharide-responsive element in the 5'-flanking region
A; Reference number: 148654; MUID:94217689; PMID:7513046
  A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Cross-references: EMBL: U02298; NID: 9460090; PIDN: AAA18302.1; PID: 9460091
B; Schall, T.J.; Simpson, N.J.; Mak, J.Y.
A; Schall, T.J.; Simpson, N.J.; Mak, J.Y.
A; Title: Molecular cloning and expression of the murine RANTES cytokine: structural and A; Reference number: A46539; MUID: 92289805; PMID: 1376260
A; Accession: A46539
   A;Molecule type: mRNA
A;Residues: 1-40,'E',42-91 <NEI>
A;Cross-references: GB:M77747; NID:g200649; PIDN:AAA40029.1; PID:g200650
C;Comment: This chemoattractant for monocytes but not neutrophils is an immediate-early
   C; Species: Mus musculus (house mouse)
C; Date: 18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change 22-Jun-1999
C; Accession: 148875; Ad6539; 148654; 156970
C; Accession: 148875; Ad6539; Tak654; 156970
J; Immunol. 152, 1182-1189, P.A.; Chang, Y.S.; Heeger, P.S.; Neilson, E.G.
J; Immunol. 152, 1182-1189, 1994
A; Title: Cloning, genomic organization, and chromosomal localization of the Scya5 gene A; Reference number: 148875; MUID:94132613; PMID:7507961
   Fiftle: Isolation and characterization of CDNA from renal tubular epithelium encoding Reference number: 156970; MUID:92277990; PMID:1375672 Accession: 156970
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K;Nellson, E.G.; Krensky, A.
K;Nellson, E.G.; Krensky, A.
Kidney Int. 41, 220-225, 1992
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  Gaps
  C;Superfamily: macrophage inflammatory protein
C;Keywords: chemotaxis; cytokine; immediate-early protein; inflammation
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Pred. No. 1.3e-10;
2; Mismatches 24; Indels
F;1-23/Domain: signal sequence #status predicted <SIG> F;24-91/Product: T-cell protein RANTES #status predicted <MAT>
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; Pred. No. 7.5e-11;
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  39.1%;
39.4%;
  Query Match
Best Local Similarity 42.4%
Matches 28; Conservative
   Query Match
Best Local Similarity 39.43
Matches 26; Conservative
  83 EYINSL 88
   62 MILNKL 67
   Genetics:
Introns: 26/1; 63/2
  A; Accession: 148654
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PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61

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Length 92;

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N'Alternate names: macrophage inflammatory protein homolog GOS19-2; small inducible c C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 20-Jun-2000
C; Accession: B35673; B30412; S10157; B30908
R; Nakao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. 10, 3646-3658, 1990
A; Title: Structures of human genes coding for cytokine LD78 and their expression.
A; Reference number: A35673; MUID:90287155; PMID:1694014
   A;Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g182849
A;Cross-references: GB:M24110; GB:M32338; NID:g182848; PIDN:AAA35859.1; PID:g182849
B;Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Sie
Nucleic Acids Res. 18, 3261-3270, 1990
A;Fitle: Two inflammatory mediator cytokine genes are closely linked and variably amp A;Reference number: S10157; MUID:90287702; PMID:1972563
   A;Cross-references: EMBL:X52149; NID:g34750; PIDN:CAA36397.1; PID:g296666
C;Comment: This protein is a member of a "small inducible" or "activation specific"
   R;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 589-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell
A;Reference number: A30412; MUID:91103879; PMID:2271120
A;Accession: B30412
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C.Superfamily: macrophage inflammatory protein.
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   10 SVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 67
   10 SVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 67
  A; Cross-references: GB:D90145; NID:q219907; PIDN:BAA14173.1; PID:q219908
  A;Status: preliminary; not compared with conceptual translation A;Molecule type: DNA A;Residues: 1-93 <BLU>
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illarity 37.9%; Pred. No. 7.1e-10;
Conservative 13; Mismatches 23
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   A; Cross-references: GDB:120368; OMIM:182283
  A; Cross-references: GDB:120369; OMIM:182284
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Best Local Similarity
Matches 22; Conserv
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Best Local Similarity
Matches 21; Conserv
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A31767
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  A;Cross-references: GB:M25315; NID:g602452; PIDN:AAA57255.1; PID:g602453
K;Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. 9, 580-602, 1990
A;Title: Three human homologs of a murine gene encoding an inhibitor of stem cell prollif A;Reference number: A30412; MUID:91103879; PMID:2271120
                                   R;Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A.
J. Immunol. 146, 4031-4040, 1991
A;Title: Genomic structure of murine macrophage inflammatory protein-1-alpha and conserv
A;Reference number: IS6104; MUID:91237116; PMID:2033269
  macrophage inflammatory protein 1-alpha precursor – human
N;Alternate names: LD78-alpha protein precursor; lymphocyte tumor promoter-induced prote
tivation protein 1
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A.Residues: 1-92 <NAKA
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B.Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist, U.
J. Immunol. 142, 1582-1590, 1989
A.Title: Mitogenic activation of human T cells induces two closely related genes which A.Reference number: A30574; MuID:89140347; PMID:2521882
  A; Molecule type: mRNA
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A; Coss-references: GB.M23178; GB.M32337; NID:g182846; PIDN:AAA35858.1; PID:g182847
B; Obaru, K.; Fukuda, M.; Maeda, S.; Shimada, K.
J. Blochem. 99, 885-894, 1986
A; Title: A cDNA clone used to study mRNA inducible in human tonsillar lymphocytes by A; Reference number: A24198; MUID:86223879; PMID:3086300
  C;Species: Homo saplens (man)
C;Date: 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change 21-Jul-2000
C;Date: 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change 21-Jul-2000
C;Datesion: A35673; A30574; A30412; A24198; A30908
R;Nakao, M.; Nomiyama, H.; Shimada, W.
Mol. Cell. Biol. 10, 3646-3658, 1990
A;Title: Structures of human genes coding for cytokine LD78 and their expression. A;Reference number: A35673; MUID:90287155; PMID:1694014
30-Pro, and 39-Thr were also found ang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A., 4031-4040, 1991
  2
   82
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C; Comment: This protein is a monokine.
C; Genetics: 23/3; 26/1; 63/2
C; Superfamily: macrophage inflammatory protein
E; L-23/Domain: signal sequence #status predicted <SIG>
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Best Local Similarity 40.9%
Matches 27; Conservative
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  A; Accession: A30412
   C;Genetics:
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Length 93;

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Indels

Length 92;

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A; Cross-references: GB:M23503; NID:9533244; PIDN:AAA4014B.1; PID:9533245
R; Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; Davatelis, G.; Wolpe, S.D.
J. Exp. Med. 158, 2251-2259; 1988
A; Title: Resolution of the two components of macrophage inflammatory protein 1, and a; Reference number: JL0088; MUID:89067830; PMID:3058856
   Cidate: 28 Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999 Cidate: 28 Aug-1989 #sequence_revision 28-Aug-1989 #text_change 16-Jul-1999 Cidatession: C30552; JL0088; PS0304; S22042 T.R.; Zurawski, G. B. Inmunol. 142, 679-687, 1989 A:Title: A family of small inducible proteins secreted by leukocytes are members of a farious activation processes.

S. Of various activation processes.

A:Accession: C30552; MUID:89093958; PMID:2521353
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F:34-58,35-74/Disulfide bonds: #status experimental
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A; Residues: 24-33,'XX',36,'X',38 <SH2>
R; Daubersies, P.; Lepretre, F.; Bailleul, B.; Grove, M.; Pragnell, I.; Plumb, I submitted to the EMBL Data Library, October 1991
A; Description: Sequence of the murine macrophage inflammatory protein 1b gene. A; Reference number: S22042
A; Accession: S22042
   2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK
  25 PMGSDPPTS-CCFSYTSRQLHRSFVMDYYETSSLCSKPAVVFLTKRGRQICANPSEPWVT
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A;Residues: 1-92 cSHE>
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A;Accession: PS0304
   A; Cross-references: EMBL: X62502; NID: 953126; PIDN: CAA44364.1; PID: 953127
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40.0%; Pred. No. 2.4e-08;
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Matches 26; Conservative
   Local Similarity
ses 24; Conserv
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Best Local S:
Matches 24,
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C;Genetics:
   RESULT 8
  a
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macrophage inflammatory protein 1-beta precursor [validated] - human
Nalternate names: cytckine HC21; G-26 protein; H400 homolog; lymphocyte activation gene
protein 2 (Act-2); T-cell activation protein gamma
C;Species: Homo saplens (man)
C;Date: 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 15-Sep-2000
C;Accession: JH0319; A40978; A31767; A37411; B30574; B45817; D30552
R;Balxeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Viegas-Pequig
Mol. Immunol. 27, 1091-1102, 1990
A;Title: Cloning and expression of a lymphocyte activation gene (LAG-1).
A;Reference number: JH0319; MUID:91061800; PMID:2247088
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A; Cross-references: GB:M23902; NID:933212; PIDN:AAA36656.1; PID:9533213
B; Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
submitted to the Brookhaven Protein Data Bank, January 1994
A; Reference number: A52206; PDB:1HUM
A; Reference number: A52206; PDB:1HUM
A; Contents: annotation; conformation and disulfide bond assignments by (1)H-NMR, residue
C; Comment: This protein is secreted by activated lymphocytes and monocytes. It is bound
  A.Cross-references: GB:X53682; NID:g34217; PIDN:CAA37723.1; PID:g34218
A.Experimental source: natural Killer cell, strain CD3-CD2+, F5, 5IIIE5
R.Napolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarra, J.R.; Seuanez, H.N.; Leonard, W.J.
J. Biol. Chem. 266, 17531-17536, 1991
A.Filler: The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsiven A:Reference number: A40978; MUID:91373378; PMID:1894635
  ne
  A;Title: Isolation daracterization of a cDNA encoding a putative cytokine which is A;Reference number: A37411; MUID:89325421; PMID:2568930 A;Accession: A37411
  A; Molecule type: mRNA
A; Residues: 1.92 ccHA.
A; Cross references: GB:X16166; NID:932035; PIDN:CAA34291.1; PID:932036
B; Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, R.; Siebenlist, U.
J. Immunol. 142, 1382-1590, 1989
A; Title: Mitogenic activation of human T cells induces two closely related genes which
A; Reference number: A30574; MUID:89140347; PMID:2521882
  A; Accession: B45817
A; Molecule type: mRNA
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A; Cross-references: GB:M57503; NID:9339726; PIDN:AAA36752.1; PID:9339727
A; Erown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
J. Immunol. 142, 679-687, 1989
A; Title: A family of small inducible proteins secreted by leukocytes are members of a sof various activation processes.
A; Reference number: A30552; MUID:89093958; PMID:2521353
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A; Residues: 1-14,'S',16-69,'G',71-92 <NAP>
A; Cross-references: GB:M69201; NID:9178021
A; Note: 15-Ala was also found
R; Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.; Leonard, W.J.
Proc. Natl. Acad. Sci. U.S.A. 85, 9704-9708, 1988
A; Tille: Identification, cloning, and characterization of an immune activation gene.
A; Reference number: A31767; MUID:89071764; PMID:2462251
   A; Molecule type: mRNA
A; Residues: 1-92 <LIP>
A; Cross-references: GB-J04130; NID:g178017; PIDN:AAA51576.1; PID:g178018
R; Chang, H.C.; Reinherz, E.L.
Eur. J. Immunol. 19, 1045-1051, 1989
  A; Molecule type: mRNA
A; Residues: 1-19, 'L', 21-92 <ZIP>
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A; Cross-references: GB MAS316; NID:g602454; PIDN:AAAS7256.1; PID:g602455
A; Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. 143, 2907-2916, 1989
A; Title: A novel polypeptide secreted by activated human T lymphocytes.
A; Reference number: A45817; MUD:90038522; PMID:2809212
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Gaps

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C;Date: 02-Uul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
C;Accession: I48147
J. Immunol. 150, 5025-5032, 1993
A;Title: cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression A;Reference number: 148147; MUID:99367104; PMID:8496603
A;Status: preliminary; translated from GB/EMBL/DDBJ
  immune activation gene 2 - rabbit

C;Species: Oryctolagus cuniculus (domestic rabbit)

C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 16-Jul-1999

C;Accession: I46730

R;Mori, S; Goto, K; Goto, F; Mutakami, K; Ohkawara, S; Yoshinaga, M.

Int. Immunol. 6, 149-156, 1994

A;Title: Dynamic changes in mRNA expression of neutrophils during the course of acure

A;Reference number: I46730; MUID:94198229; PMID:8148323
  25 PDGVN--TPTCCYTFNK-QIPEKRVKGYERITSSRCPQEAVIFRTLKNKEVCADPTQKWV
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39.1%; Pred. No. 2.5e-07;
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Best Local Similarity
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   35
  N
  82
   61
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   RESULT 11
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C; Species: Homo sapiens (man)
C; Date: (02-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000
C; Accession: JC5295
R; Van Collile, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van Da Blochem: Blophys. Res. Commun. 231, 726-730, 1997
A; Title: Human monocyte chemotactic protein-2: CDNA cloning and regulated expression of A; Reference number: JC5295; MuID:97224420; PMID:9070881
A; Reference number: JC5295; MuID:97224420; PMID:9070881
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A; Genetics:
A; Genetics:
A; Genetics:
A; Genetics:
C; Superfamily: macrophage inflammatory protein
F; 1-23/Domain: signal sequence #status predicted <ANT>
F; 24-99/Product: monocyte chemotactic, protein-2 #status predicted <MAT>
  A)Cross-references: GB:X72309
B)Cohem. Blochem. CG:; Froyen, G.; Fiten, P.; Proost, P.; Van Damme, J.
Biochem. Blochem. Blophys. Res. Commun. 191, 535-542, 1993
A)Title: Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the cDNA and A;Reference number: JC1478; MUID:93213290; PMID:8461011
A)Accession: JC1478
A;Molecule type: mRNA
A;Residues: 1-109 <AP2-A;Cross-references: GB:X72308; GB:S57464; NID:93928270; PIDN:CAA51055.1; PID:9313708
B;Minty, A.; Chalblon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, submitted to the EMBL Data Library, March 1993
A;Description: Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoattrack.
   A;Cross-references: EMBL:X71087; NID:g288396; PIDN:CAASO405.1; PID:g288397
C;Comment: This protein induces proteinase secretion and chemotaxis by macrophages and
C;Genetics:
A;Gene: GDB:SCXA7; SCXA6; MCP-3
   monocyte chemotactic protein 3 precursor - human N;Alternate names: monocyte chemoattractant protein MCP-3 C;Species: Hono sapiens (man) C;Date: 28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change 16-Jul-1999 C;Accession: A54678; JC1478; S32222 R;Opdenakker, G.; Fitten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, A;Title: The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the A;Reference number: A54678; MUID:94375065; PMID:7916328
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29.7%;
37.3%;
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A; Residues: 1-99 <YOS>
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   A; Accession: I51841
  A; Accession: A60299
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  C; Species: Sus scrofa domestica (domestic pig)
C; Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999
C; Accession. JC2417.
R; Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Richem. Biophys. Res. Commun. 205, 148-153, 1994
A; Fitle: Porcine Luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analys
A; Reference number: JC2417; MUID:95091716; PMID:7999015
   immediate-early serum-responsive protein JE precursor - rat
N;Alternate names: monocyte chemoattractant protein-1
C;Species: Rattus norvegicus (Norway rat)
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C;Accession: 507723; JN0128
R;Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J.
R*Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J.
A*Title: Analysis of the rat JE gene promoter identifies an AP-1 binding site essential
A;Reference number: 507723; MUID:90174947; PMID:2106664
A;Accession: 507723
  exp
  A. Experimental source: spleen cells A. Note: the authors translated the codon GAA for residue 62 as Lys and 6CT for residue
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C;Superfamily: macrophage inflammatory protein
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A; Cross-references: EMBL:X17053; NID:955530; PIDN:CAA34901.1; PID:955531
R; Yoshimura, T.; Takeya, M.; Takahashi, K.
Biochem: Biochem: Scommun. 174, 504-509, 1991
Biochem: Biochem: Johlys. Res. Commun. 174, 504-509, 1991
A; Title: Molecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its
A; Reference number: JN0128; MUID:91128376; PMID:1704226
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35.8%; Pred. No. 1.1e-06;
ive 12; Mismatches 25
  - pig
     Mismatches
  monocyte chemoattractant protein-2 precursor
  15;
  24; Conservative
  Conservative
   Similarity
  86 SMKLLDQ 92
  63 ILNKLSQ 69
  :: |
84 EYVDDL 89
  62 MILNKL 67
  A; Molecule type: mRNA A; Residues: 1-99 <HOS>
22;
  Query Match
   Best Local
Matches 2
  C; Genetics:
  RESULT 13
JC2417
Matches
  RESULT 14
   g
  g
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```

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A)Status: not compared with conceptual translation
A;Status: not compared with conceptual translation
A;Rolcule type: mRNA
A;Residues: 1-99 < AGOT.
B;Furutani; Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukul, T.; Yamada, M.; Larsen, C
Biochem. Biophys. Res. Commun. 159, 249-255, 1989
A;Title: Cloning and sequencing of the cDNA for human monocyte chemotactic and acti-a
A;Reference number: A32300; MUID:89165862; PMID:2923622
A;Status: not compared with conceptual translation
   A; Molecule type: mRNA
A; Residues: 1-99 < FURD.
A; Teosidues: 1-99 < FURD.
A; Residues: 1-99 < FURD.
A; Residueson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanow t
   monocyte chemoattractant protein 1 precursor - human N.Alternate names: GDCF-1; alloma-derived monocyte chemotactic factor 1; MCAF; MCP-2; N.Contains: glioma-derived chemotactic factor 2 (GDCF-2) C.Species: Homo sapiens (man) C.Species: Homo sapiens (man) Esquence_revision 20-Feb-1993 #text_change 16-Jul-1999 C.Accession: A35474; A33476; S03339; I51841; A60299; A32300; A32396; A34561; I57488 R; Shyy, Y.J; Li, Y.S.; Kolattukudy, P.E. Biochem Biophys. Res. Commun. 169, 346-351, 1990 Biochem Biophys. Res. Commun. 169, 346-351, 1990 A.Tille: Structure of human monocyte chemotactic protein gene and its regulation by T.A.Reference number: A35474; MUID:90290466; PMID:2357211
  A;Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
R;Bottazzl, B.; Colotta, F.; Sica, A.; Nobill, N.; Mantovani, A.
R;Bottazzl, B.; Colotta, F.; 91990
A;Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotacri
  Ħ
  A;Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; [R;Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J. RFBS Lett., 244, 487-493, 1989 A;Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning
   ï
   A;Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124
A;Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124
B;Rollins, B.J.; Stler, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. 9, 4687-4695, 1989
A;Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A;Reference number: A33476; MUID:90097880; PMID:2513477
A;Accession: A33476
  92
  Gaps
  12 CCRDYVRYRLPLRVVKEY-FYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
   A)Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514 A)Experimental source: glioma cell line U-105MG R:Yoshimura, T.; Leonard, E.J. R.;Yoshimura, T.; Leonard, E.J. Adv. Exp. Med. Biol. 305, 47-56, 1991 A;Title: Human monocyte chemoattractant protein-1 (MCP-1). A;Reference number: I51841; MUID:92095166; PMID:1661560
   Ĥ
                                148;
                                    Length
   Indels
   A;Reference number: S03339; MUID:89153605; PMID:2465924 A;Accession: S03339 A;Status: not compared with conceptual translation
   A; Reference number: A60299; MUID: 90216082; PMID: 2182547
Score 112.5; DB 1;
Pred. No. 2,5e-06;
   A; Status: profile mary; translated from GB/EMBL/DDBJ A; MOlecule type: mRNA A; Residues: 1-99 <YO2>
  10; Mismatches
```

```
A Map position: 17q11.2-17q12

(Superfamily: macrophage inflammatory protein

(Superfamily: macrophage inflammatory protein

(Skeywords: cytokine; glycoprotein; inflammation; pyroglutamic acid

(SKeywords: cytokine; glycoprotein; inflammation; pyroglutamic acid

(S.1-23/Domain: signal sequence #status predicted <SIG>

(S.24-99/Product: monocyte chemoattractant protein 1 #status experimental <MAT>

(S.24-99/Product: monocyte chemoattractant protein 1, short form #status experimental <MAT>

(S.24-Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status experiment (S.37/Binding site: carbohydrate (Asn) (covalent) #status predicted
   A; Molecule type: mRNA
A; Residues: 1-99 <LIY>
A; Rize, Ch.; Su, G.F.; Yuan, Y.; Huang, C.F.
Chinese J. Microbiol. Immunol. 14, 29-32, 1994
A; Title: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1 (MCA; Reference number: JC1096
  A; Molecule type: protein
A; Residues: 'X', 25-99 <ROB>
A; Residues: 'X', 25-99 <ROB>
A; Residues: 'X', 25-99 <ROB>
B; Conings, R: Lenaerts, J.P.; Billiau, A.; Van Damme, J.
Biochem: Biophys. Res. Commun. 167, 904-909, 1990
A; Title: Identification of the monocyte chemotactic protein from human osteosarcoma cell
A; Reference number: A34561; MUID:90211336; PMID:2322286
  A; Molecule type: protein
A; Residues: 29-33, XX', 36-52;82-92 <DEC>
A; Residues: 29-33, XX', Might, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
R;Li, Y.S.; Shyy, Y.J.; Waight, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
Mol. Cell. Blochem. 126, 61-68, 1993
A;Title: The expression of monocyte chemotactic protein (MCP-1) in human vascular endoth
A;Reference number: 157488; MUID:94150478; PMID:8107690
Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989
A;Title: Complete amino acid sequence of a human monocyte chemoattractant, a putative me
A;Reference number: A32396; MUID:89184525; PMID:2648385
   7
  2 PYGANMEDSV----CCRDYVRYRLPLRVVKEY-FYTSDSCPRPGVVLLTFRDKEICADP
   6; Gaps
   Query Match 28.0%; Score 106; DB 2; Length 99; Best Local Similarity 29.7%; Pred. No. 1e-05; Matches 22; Conservative 16; Mismatches 30; Indels
  C;Genetics:
A;Gene: GDB:SCYA2
A;Cross-references: GDB:125279; OMIM:158105
  Status: translated from GB/EMBL/DDBJ
  A; Accession: JC1096
A; Molecule type: mRNA
A; Residues: 24-28, 'Q', 30-99 <YEQ>
  : ||: :: | :
79 KQKWVQDSMDHLDK 92
  56 RVPWVKMILNKLSQ 69
  A; Accession: A32396
   A; Accession: A34561
  Accession: 157488
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Search completed: July 28, 2003, 04:15:51 Job time: 6.81303 secs

# GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

July 28, 2003, 03:58:03 ; Search time 3.62395 Seconds (without alignments) 789.709 Million cell updates/sec Run on:

US-09-509-165A-32
379
1 GPYGANMEDSVCCRDYVRYR......EICADPRVPWVKMILNKLSQ 69 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

112892 seqs, 41476328 residues Searched:

112892 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt\_40:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

| Description   | 000626 homo sapien | mus m      | P55774 h small ind | P50229 rattus norv | P13501 homo sapien | mus m      | P50231 rattus norv |            |            | cavi        |            | mus 1      |            |            |            | P50230 rattus norv |            |            |            |           | P80075 homo sapien |            |            |            | Q99616 homo sapien | oryc       | P49873 sus scrofa | P14844 rattus norv | homo       | homo       | mus m      | Q99731 homo sapien | Q9jkc0 mus musculu |
|---------------|--------------------|------------|--------------------|--------------------|--------------------|------------|--------------------|------------|------------|-------------|------------|------------|------------|------------|------------|--------------------|------------|------------|------------|-----------|--------------------|------------|------------|------------|--------------------|------------|-------------------|--------------------|------------|------------|------------|--------------------|--------------------|
| SUMMAKIES     | SY22_HUMAN         | SY22_MOUSE | SY18_HUMAN         | SY03_RAT           | SY05_HUMAN         | SY05_MOUSE | SY05_RAT           | SY03_MOUSE | SY04_CHICK | SY05_CAVPO. | SY03_HUMAN | SY12_MOUSE | SY05_BOVIN | SY15_HUMAN | SY3L_HUMAN | SY04_RAT           | SY14_HUMAN | SY04_HUMAN | SY04_MOUSE | VMI2_KSHV | SY08_HUMAN         | REG1_BOVIN | SY07_HUMAN | SY02_CAVPO | SY13_HUMAN         | SY04_RABIT | SY08_PIG          | SY02_RAT           | SY17_HUMAN | SY26_HUMAN | SY19_MOUSE | SY19_HUMAN         | SY24_MOUSE         |
| Length DB     | 93 1               | 92 1       |                    |                    |                    |            | 92 1               |            |            |             |            |            |            |            | 93 1       | 92 1               |            |            |            | 94 1      |                    |            | 66         |            | 98 1               |            | 66                |                    | 94 1       |            | 108 1      |                    | 119 1              |
| ch            | 95.5               | 69.7       | 40.4               | 40.1               | 39.1               | 38.5       | æ                  | 7          |            |             | 9          | 35.8       | S          | 35.4       | δ.         | ď.                 |            | щ<br>Э     |            | 32.7      | 32.2               | 32.1       | 31.9       | 31.7       | 30.7               | 30.5       | 30.1              | 29.7               | 29.6       | 29.6       | 29.4       | σ.                 | 28.9               |
| Score         | 362                | 264        | 153                | 152                | 148                | 146        | 146                | 142        | 141.5      | 140         | 140        | 135.5      | 135        | 134        | 133        | 132.5              | 130        | 127.5      | 126.5      | 124       | 122                | 121.5      | 121        | 120        | 116.5              | 115.5      | 114               | 112.5              | 112        | 112        | 111.5      | 110.5              | 109.5              |
| Result<br>No. | -                  | 7          | c                  | 4                  | S                  | 9          | 7                  | 8          | 6          | 10          | 11         | 12         | 13         | 14         | 15         | 16                 | 17         | 18         | 19         | 20        | 21                 | 22         | 23         | 24         | 25                 | 56         | 27                | 28                 | 29         | 30         | 31         | 32                 | 33                 |

|                        | P55773 homo sapien<br>P13500 homo sapien |                       |              |                          |                          |   |
|------------------------|------------------------------------------|-----------------------|--------------|--------------------------|--------------------------|---|
| SY05_PIG<br>SY08_BOVIN | SY23_HUMAN<br>SY02_HUMAN                 | SY02_MACFA SY02_MOUSE | EOTA_HUMAN   | EOTA_CAVPO<br>MCPA_BOVIN | SY08_MOUSE<br>SY06_MOUSE | ı |
|                        | 1                                        |                       |              |                          |                          |   |
| 50<br>99               | 120<br>99                                | 99<br>148             | 97           | 96                       | 97<br>116                |   |
| 28.5                   | 28.2<br>28.0                             | 28.0<br>27.8          | 27.6<br>26.8 | 26.6                     | 26.3                     |   |
| 108                    | 107                                      | 106<br>105.5          | 104.5        | 101                      | 99.5                     |   |
| 34<br>35               | 36                                       | 8 6<br>8 7            | 40           | 4 4<br>3 8               | 44                       |   |

## ALIGNMENTS

| SY22_HUMAN  SY22_HUMAN  AC 00062  DJ D 00062  DJ 15-JU  NOSI_NOSI  RA GOGIS  RA GOGIS  RA GOGIS  RA MEDDII  RA MODE  RA MODE  RA MODE  RA FULD  RA STRAU  RA STRAU |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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SY18_HUMAN
'P55774;
  DISULFID
  SEQUENCE
   RESULT 3
SY18_HUMAN
  CHAIN
  Matches
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  á
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  1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
  25 GPYGANMEDSVCCRDYVXYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEICADPRVPWV 84
chemokine receptor 4.";
J. Biol. Chem. 273:1764-1768(1998).

J. Biol. Chem. 273:1764-1768(1998).

-! FUNCTION: MAY PLAY A ROLE IN THE TRAFFICKING OF ACTIVATED/EFFECTOR

T LYMPHOCYTES TO INFLAMMATORY SITES AND OTHER ASPECTS OF ACTIVATED

T LYMPHOCYTE PHYSIOLOGY. CHEMOTACTIC FOR MONOCYTES, DENDRITIC

CELLS AND NATUREL KILLER CELLS. MILLO CHEMOATTRACTANT FOR PRIMARY

ACTIVATED T LYMPHOCYTES AND A POTENT CHEMOATTRACTANT FOR

CHRONICALLY ACTIVATED T LYMPHOCYTES BUT HAS NO CHEMOATTRACTANT
  SUBCELLULAR LOCATION: Secreted.

TISSUE SPECIFICITY: HIGHLY EXPRESSED IN MACROPHAGE AND IN MONOSYTE-DERIVED DENNIYIE CELLS, AND THYMUS. ALSO FOUND IN LYMPH NODE, APPENDIX, ACTIVATED MONOCYTES, RESTING AND ACTIVATED MONOCYTES, RESTING AND ACTIVATED EXPRESSION IN LUNG AND SPLEEN. VERY WEAK EXPRESSION IN SMALL INTESTINE.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
  Gaps
  ACTIVITY FOR NEUTROPHILS, EOSINOPHILS, AND RESTING T LYMPHOCYTES BINDS TO CCR4.
  15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
5-JUN-2002 (Rel. 41, Last annotation update)
78mall inducible cytokine A22 precursor (CCL22) (CC chemokine ABCD-1)
(Activated B and dendritic cell-derived).
   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
   ;
0
   Score 362; DB 1; Length 93;
Pred. No. 3.2e-38;
3; Mismatches 1; Indels
  SMALL INDUCIBLE CYTOKINE A22
  631FBE9CC083F787 CRC64;
  min, very IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
  92 AA.
   BY SIMILARITY.

BY SIMILARITY.
   EMBL; U83171; AAB58360.1; -.
EMBL; U83239; AAB53372.1; -.
EMBL; AC004382; AAC24306.1; -.
EMBL; BC027952; AAH27952.1; -.
HSSP; Q98157; 1CM9.
   Cytokine; Chemotaxis; Signal
   37 76
93 AA; 10580 MW;
  Query Match 95.5%;
Best Local Similarity 94.2%;
Matches 65; Conservative
   HGNC:10621; SCYA22.
   STANDARD;
   C-C) (CHEMOKINE CC).
  61 KMILNKLSQ 69
   KMILNKLSQ 93
   Mus musculus (Mouse)
  NCBI_TaxID=10090;
  SCYA22 OR ABCD1
   Genew; HGNC
MIM; 602957
  SY22_MOUSE
088430;
  DISULFID
DISULFID
SEQUENCE
   SIGNAL
  SY22_MOUSE
  RESULT
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  ö
   1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
  84
  "Activated murine B lymphocytes and dendritic cells produce a novel CC chemokine which acts selectively on activated T cells.";
J. EXP. Med. 188:451-463(1998).

I. EXP. Med. 188:451-463(1998).

I. FUNCTION: CHEMOTACTIC FOR ACTIVATED T LYMPHOCYTES. MAY PLAY AN IMPORTANT ROLE IN THE COLLABORATION OF DENDRITIC CELLS AND B LYMPHOCYTES WITH T CELLS IN IMMUNE RESPONSES.

I. SUBCELLOLAR LOCATION: Secreted.

I. TISSUE SPECIFICITY: EXPRESSED BY ACTIVATED SPLENIC B LYMPHOCYTES AND DENDRITIC CELLS. LOW EXPRESSION IN LONG, THYMOCYTES, LYMPH NODE, AND UNSTIMULATED SPLENIC CELLS.

I. SIMLLARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTORINE
   25 GPYGANVEDSICCQDXIRHPLPSRLVKEFFWTSKSCRKPGVVLITVKNRDICADPRQVWV
  01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
115-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A18 precursor (CCL18) (Macrophage inflammatory protein 4) (MIP-4) (Pulmonary and activation-regulated chemokine) (CC chemokine PARC) (Alternative macrophage activation-associated CC chemokine 1) (AMAC-1) (Dendritic cell chemokine 1) (DC-
   Gaps
  Homo sapiens (Human).
Bustrycta: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
  ö
MEDLINE=9835351; PubMed=9687523; Schaniel C., Pardall E., Sallusto F., Speletas M., Ruedl C., Shimizu T., Seidl T., Andersson J., Melchers F., Rolink A.G., Sideras P.;
   SMALL INDUCIBLE CYTOKINE A22.
BY SIMILARITY.
BY SIMILARITY.
39859881CDAE07CA CRC64;
   Length 92;
   Score 264; DB 1; Length >*./
Pred. No. 4.86-26;
   Pram; PRO0048; IL8; 1.
SMART; SM00199; SCY: 1.
PROSTITE; PS00472; SMALL_CYTOKINES_CC; FALSE_NEG.
CYTOKINE; Chemotaxis; Signal; Inflammatory response.
SIGNAL
  89 AA.
  16; Mismatches
  SCYA18 OR MIP4 OR PARC OR AMAC1 OR DCCK1.
  HSSP; Q98157; 1CM9.
MGD; MGI:1306779; SCya22.
InterPro: IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
   EMBL; AF052505; AAC40200.1; -.
  25 92 SI
36 60 B
37 76 B
92 AA; 10302 MW;
  64.78;
   69.78;
   44; Conservative
  C-C) (CHEMOKINE CC).
   STANDARD;
   | :|:|||
85 KKLLHKLS 92
   61 KMILNKLS 68
   Query Match
Best Local Similarity
```

us-09-509-165a-32.rsp

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SY03_RAT
   RESULT
  g
  ò
   g
  ò
  POLITY O., Kodelja V., Guillot P., Orfanos C.E., Goerdt S.;
"The genomic locus for the AMAC-1 gene contains possible pseudo-exons within the first intron sequence.";
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES IN LYMPH NODES. ATTRACTS NALVE T LYMPHOCYTES TOWARD DENDRITIC CELLS AND ACTIVATED MACROPHAGES IN LYMPH NODES, HAS CHEMOTACTIC ACTIVITY FOR NALVE T CELLS, CD4+ AND CD8+ T CELLS AND THUS MAY PLAY A ROLE IN BOTH HUMORAL AND CELL-MEDIATED
  MEDLINE=97376836; PUDMed=9233607; Hieshlma K., Imai T., Baba M., Shoudai K., Ishizuka K., Mai T., Baba M., Shoudai K., Ishizuka K., Takruta J., Takeya M., Sakaki K., Takatsuki K., Miura R., Opdenakker G., van Damme J., Yoshie O., Nomiyama H.; A novel human CC chemokine PARC that is most homologous to macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for J lymphocytes, but not for monocytes.";
   MEDINE=99168908; PubMed=10049593;
Tasaki Y., Fukuda S., Iio M., Miura R., Imai T., Sugano S., Yoshie O., Hughes A.L., Nomiyama H.;
"Chemokine PARC gene (SCYA18) generated by fusion of two MIP-lalpha/LD78alpha-like genes.";
Genomics 55:353-357(1999).
   MEDLINE-97275308; PubMed-9129202; Wells T.N.C.; Pelisch M.C.; "The chemoKine information source: identification and characterization of novel chemoKines using the WorldWideWeb and expressed sequence tag
   IMMUNITY RESPONSES.
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN LUNG, LYMPH NODES,
  Kodelja V., Mueller C., Politz O., Hakij N., Orfanos C.E., Goerdt S., "Alternative macrophage activation-associated CC-chemokine-1, a novel structural homologue of macrophage inflammatory protein-1 alpha with J. Immunol. 160:1411-1418(1998).
  'A dendritic-cell-derived C-C chemokine that preferentially attracts
  Guan P., Burghes A.H.M., Cunningham A., Lira P., Brissette W.H., Necte K., McColl S.R.; Genomic organization and biological characterization of the novel human Cc chemokine Dc-Cr1/PARC/MIP-4/SCYA18."; Genomics 56:296-302(1999).
  Adema G.J., Hartgers F., Verstraten R., de Vries E., Marland G.,
Menon S., Foster J., Xu Y., Nooyen P., McClanahan T., Bacon K.B.,
   SEQUENCE FROM N.A., AND SEQUENCE OF N-TERMINUS.
TISSUE-Dendritic cell;
MEDLINE-97336102; Pubmed-9192897;
                          Li H., Ruben S.; "Macrophage inflammatory protein-3 and -4."; Patent number US5504003, 02-APR-1996.
  SEQUENCE FROM N.A., AND CHARACTERIZATION. MEDLINE-99189237; Pubmed-10087196;
  SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. TISSUE-Aorta, and Lung;
   SEQUENCE FROM N.A.
MEDLINE-98230488; PubMed-9570561;
   Leukoc. Biol. 61:545-550(1997).
  naive T cells.";
Nature 387:713-717(1997).
  DISCUSSION OF SEQUENCE.
  SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
   databases.
   Figdor
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   ä
   63
  81
PLACENTA, BONE MARROW, DENDRITIC CELLS PRESENT IN GERMINAL CENTERS AND T-CELL AREAS OF SECONDARY LYMPHOID ORGANS AND MACROPHAGES DERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY PERIPHERAL BLOOD MONOCYTES. NOT EXPRESSED BY DERIPHERAL BLOOD MONOCYTES AND A MONOCYTE-TO-MACROPHAGE DIFFERENTIATION IS A PREREQUISITE FOR EXPRESSION. IL-4, IL-13, AND INDUCTION. SPECIFICALLY INDUCED IN MACROPHAGES BY IL-4, IL-13, AND EXERT A SLIGHTLY POSITIVE SYNENGISTIC EFFECT IN COMBINATION WITH IL-4. STRONGLY INDUCED IN SEVERAL HUMAN CELL LINES, INCLUDING MONOCYTIC Q1937 CELLS, BY PHORBOL MYRISTATE ACETATE (PMA).

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
   24 GTNKE--LCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKRGRQICADDNKKWVQKY
   01-OCT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last sequence update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha).
   4 GANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMI
  Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
   5
   40.4%; Score 153; DB 1; Length 89; 42.2%; Pred. No. 2.9e-12;
   SMALL INDUCIBLE CYTOKINE A18
  21; Indels
  Inflammatory response; Signal.
  C287B94B9C0518E4 CRC64;
   92 AA.
  ; Pred. No. 2.9e
14; Mismatches
   BY SIMILARITY
BY SIMILARITY
   InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM0199; SCY; 1.
PR0SITE; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotax1s; Inflammatory respo
   EMBL, Y13710; CAA74039.1; EMBL, AB012113; BAA34368.1; EMBL; AF082214; AAC32287.1; EMBL, AF082213; AAC32287.1; JOINED. EMBL, AF111198; AAD30390.1; HSSP; P13236; 1HUM.
  PRT;
  EMBL; AB000221; BAA21670.1; -.
  9849 MW;
  HGNC:10616; SCYA18
  SEQUENCE FROM N.A.
STRAIN=CD-1; TISSUE=Lung;
   27; Conservative
  STANDARD;
   Local Similarity
   89 AA;
  NCBI_TaxID=10116;
   64 LNKL 67
  82 ISDL 85
   Genew; HGNC:1
MIM; 603757;
  SY03_RAT
P50229;
   DISULFID
  SEQUENCE
   DISULFID
  Query Match
   Matches
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SY05_HUMAN
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  ä
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
   SUBCELLULAR LOCATION: Secreted.
INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
   PSO0472; SMALL_CYTOKINES_CC; 1.
Chemotaxis; Inflammatory response; Signal; Heparin-binding
   Gaps
MEDLINE-95298037; PubMed-7779098; Shi M.M., Godleski J.J., Paulauskis J.D.; M.M., cloudar cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar macrophages."; Biochem. Biophys. Res. Commun. 211:289-295(1995).
  STRAIN=Long Evans; TISSUE-Lung;
MEDLINE=95238980; PubMed=7722328;
Shanley T.P., Schmal H., Friedl H.P., Jones M.L., Ward P.A.;
"Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in acute lung injury in rats.";
   Length 92;
  ; Pred. No. 4e-12;
16; Mismatches 20; Indels
  . -> T (IN REF. 2).
-> W (IN REF. 2 AND 3).
14E861C647F9A2EB CRC64;
   INDUCIBLE CYTOKINE
   Score 152; DB 1;
   BY SIMILARITY.

BY SIMILARITY.

A -> T (IN REF

C -> W (IN REF
   InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
  MEDLINE-96183056; PubMed-8607872;
  acute lung injury in rats.";
J. Immunol. 154:4793-4802(1995).
  57
10335 MW;
   EMBL; U22414; AAA80608.1; -.
   40.18;
  42.48;
   U06435; AAA96498.1;
  28; Conservative
   PS00472; SMALL_
   Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
  88
   [2]
SEQUENCE FROM N.A.
  [3]
SEQUENCE OF 24-57.
   Local Similarity
  62 MILNKL 67
   AA;
  BINDS HEPARIN.
  :: EXITEL
  8
  STRAIN-Wistar
   Cytokine;
  DISULFID
  CONFLICT
  83
   DISULFID
   Query Match
   PROSITE;
   SIGNAL
  Matches
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Schall T.J., Jongstra J., Dyer B.J., Jorgensen J., Clayberger C., Davis M.M., Krensky A.M.,

"A human T cell-specific molecule is a member of a new gene family.";

"I Immunol. 141:1018-1025(1988).
  Nomiyama H., Fukuda S., IIo M., Tanase S., Miura R., Yoshie O.; "Organization of the chemokine gene cluster on human chromosome 1/q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and
SYOS_HUMAN STANDARD; PRT; 91 AA.
P13501; 043646; Q9NYA2;
01-JAN-1990 (Rel. 13, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta) (T cell-specific protein P228).
   "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."; Science 270:1811-1815(1995).
   MEDLINE-99111238; PubMed-9889151; Alkan J., McSparron H., Milken J., Hoover D., Thompson D.A., Barlow P.N., McSparron H., Picard L., Wlodawer A., Lubkowski J., Kent S.B.; "Total chemical synthesis and high-resolution crystal structure of the potent anti-HIV protein AOP-RANTES."; Chem. Biol. 6:43-51(1999).
   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
  Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
   Skelton N.J., Aspiras F., Ogez J., Schall T.J.;
"Proton NMR assignments and solution conformation of RANTES,
  SEQUENCE FROM N.A.
Zeng O.D., Yang R.Y., Fu L.C.;
"The complete sequence of human beta-chemokine RANTES mR
Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
   Strausberg R.;
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
   Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
  MEDLINE-95352612; PubMed-7542919; Chung C.W., Cooke R.M., Proudfoot A.E.I., Wells T.N.C. "The three-dimensional solution structure of RANTES."; Biochemistry 34:9307-9314(1995).
  SYNTHESIS, AND X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
   SEQUENCE OF 49-56; 71-79 AND 83-91, AND FUNCTION
  Interferon Cytokine Res. 19:227-234(1999).
   MEDLINE-99228475; PubMed-10213461;
   MEDLINE-96106406; Pubmed-8525373;
  MEDLINE-95244456; PubMed-7537088;
  MEDLINE-88285659; PubMed-2456327;
   chemokine of the C-C type.";
Biochemistry 34:5329-5342(1995).
   Homo sapiens (Human)
  [5]
SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
  SEQUENCE FROM N.A
  STRUCTURE BY NMR.
   STRUCTURE BY NMR
  rissue-Brain;
   Strausberg R
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  SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK
  2; Gaps
X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
Hoover D.M., Shaw J., Gryczynski Z., Proudfoot A.E.I., Wells T.N.C.,
  "The crystal structure of Met-RANTES: comparison with native RANTES and AOP-RANTES.";
   PROSITE; PS00472; SWALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response;
  Length 91;
  24; Indels
   SMALL INDUCIBLE CYTOKINE AS
  A -> R (IN REF. 1 AND 4).
A -> V (IN REF. 4).
FBOBFAF9A87C620F CRC64;
  ; Score 148; DB 1;
; Pred. No. 1.3e-11;
14; Mismatches 24
   91 AA.
   InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
   PRT;
  AF043341; AAC03541.1; -. AF088219; AAC63331.1; -. AF266753; AAF73070.1; -. BC008600; AAH08600.1; -.
  01-JUL-1993 (Rel. 26, Created)
  EMBL; M21121; AAA36725.1; -.
  14
9990 MW;
  39.1%;
  39.48;
  PDB; 1B7O; 03-70N-95. PDB; 1B3A; 23-APR-99. PDB; 1EQT; 19-APR-00. Genew; HGNC:10632; SCYAS. Infactor
  Query Match 39.19
Best Local Similarity 39.49
Matches 26; Conservative
   STANDARD;
   Pfam; PF00048; IL8; 1.
   23
91
57
73
  1HRJ; 14-OCT-96.
1RTN; 03-JUN-95.
  PIR; A28815; A28815
   62 MILNKL 67
   EYINSL 88
  91 AA;
                                  Lubkowski J.;
   3D-structure,
SIGNAL
  SY05_MOUSE
P30882;
   DISULFID
CONFLICT
CONFLICT
   83
   DISULFID
  SEQUENCE
   SMART;
  EMBL:
  EMBL;
  EMBL;
   SY05_MOUSE
   1 % E
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  MA R.Z., Teuscher C.;
Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHENDATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND EOSINOPHILS.
-!- SUBCELLULES AND ACTIVATES EOSINOPHILS.
-!- SUBCELLULES TO SECRETED.
-!- STATION: SECRETED.
-!- SIMILARITY: BELCHORS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
   SEQUENCE FROM N.A. MEDLINE-92277990; PubMed=1375672; Heeger P., Woll G., Meyers C., Sun M.J., O'Farrell S.C., Krensky A.M., Nellson E.G. Trensky A.M., Nells
01-JUN-1994 (Rel. 29, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
protein) (SIS-delta) (MuRantes)
   SEVUENCE TO SET ALM SWISS;
STRAIN-NIH SWISS;
MEDLINE-94112613; PubMed=7507961;
Danoff T.M., Lalley P.A., Chang Y.S., Heeger P.S., Neilson E.G.;
"Cloning, genomic organization, and chromosomal localization of the
  Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
  "Definition of a lipopolysaccharide-responsive element in the 5'-flanking regions of MuRantes and crg-2.";
Mol. Cell. Biol. 14:2914-2925(1994).
   Schall T.J., Simpson N.J., Mak J.Y.;
"Molecular cloning and expression of the murine RANTES cytokine:
structural and functional conservation between mouse and man.";
Eur. J. Immunol. 22:1477-1481(1992).
   Shin H.S., Drysdale B.E., Shin M.L., Noble P.W., Fisher S.N., Paznekas W.A.;
  SEQUENCE FROM N.A. STRAIN-BALB/CJ, BIO.S/J, NOD/LTJ, and SJL/J; TISSUE-Spleen;
  MGD; MGI:98262; Scya5.
InterPro; IPR000827; CC_chemkine_sml.
   MEDLINE-92289805; PubMed-1376260;
  STRAIN=BALB/c;
MEDLINE=94217689; PubMed=7513046;
  Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
  EMBL; AF065944; AAC17511.1; -.
   encoding murine Rantes.";
Kidney Int. 41:220-225(1992).
   EMBL; M7747; AAA40029.1; -. EMBL; S37648; AAB22330.1; -.
   EMBL; U02298; AAA18302.1; -. EMBL; X70675; CAA50011.1; -.
   EMBL; AF065946; AAC17513.1;
EMBL; AF065947; AAC17514.1;
HSSP; P13501; 1RTN.
  Mus musculus (Mouse).
  SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
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STRAIN-DBA/2J
  Cerami A.;
  REVISIONS.
  SY03_MOUSE
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   οy
   between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
  This SWISS-PROT entry is copyright. It is produced through a collaboration
   PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
  -1- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM BASOPHILS AND ACTIVATES BOSINOPHILS (BY SIMILARITY).
-1- SUBCELLULAR LOCATION: Secreted.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
   Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
  Gaps
   01-001-1996 (Rel. 34, Created)
01-001-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES protein) (SIS-delta).
   HSSP; #130.1; 1ALN.N.
InterPro; IPR000827; CC_Chemkine_sml.
InterPro; IPR001821; Chemokine_ILB.
Pfam; PR00048; ILB: 1.
SMART; SM00199; SCT.
SMART; SM00199; SCT.
CYtokine; Chemotaxis; T-cell; Signal; Inflammatory response.
TCANAT.

POTENTIAL.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
Cytokine; PS00472; SMALL_CYTOKINES_CC; 1.
Cytokine; Chemotaxis; T-cell; Signal; Inflammatory response.
SIGNAL
   Score 146; DB 1; Length 91;
Pred. No. 2.2e-11;
  SMALL INDUCIBLE CYTOKINE A5.
BY SIMILARITY.
BY SIMILARITY.
   24; Indels
   SMALL INDUCIBLE CYTOKINE AS.
BY SIMILARITY.
BY SIMILARITY.
B4FBEC2B4208ABC6 CRC64;
  STRAIN-Long Evans; TISSUE-Lung;
Jones M.L., Shanley T.P., Ward P.A.;
Submitted (FEB-1994) to the EMBL/GenBank/DDBJ databases.
  T -> A (IN REF. 2).
A -> E (IN REF. 1).
5DFD66F4684FE1C8 CRC64;
   92 AA
   12; Mismatches
   Score 146;
   PRT;
   10071 MW;
   10170 MW;
  38.58;
  42.48;
  EMBL; U06436; AAA96499.1; -. HSSP; P13501; 1RTN.
  Conservative
   STANDARD;
   C-C) (CHEMOKINE CC).
   : | |
83 EYINYL 88
   62 MILNKL 67
  Similarity
  91 AA;
  SEQUENCE FROM N.A.
   92 AA;
  NCBI_TaxID=10116;
   DISULFID
  SY05_RAT
P50231;
  DISULFID
DISULFID
SEQUENCE
  CONFLICT
   SEQUENCE
  Query Match
  Local
   CHAIN
  Matches
   SY05_RAT
   RESULT
  DRAN MARKET TET TET SO
  a
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  q
   à
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1;
  61
  83
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK
  26 PYGS--DITPCCFAYLSLALPRAHVKEYFYTSSKCSNLAVVFVTRRNRQVCANPEKKWVQ
  SYGNOUSE STANDARD; PRT; 92 AA.
P10855; P14096;
01-JUL-1989 (Rel. 11, Created)
01-JUL-1980 (Rel. 14, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory protein 1-alpha) (MIP-1-alpha) (TY-5) (SIS-alpha) (Heparin-binding chemotaxis protein) (L2G25B).
  Gaps
  "Genomic structure of murine macrophage inflammatory protein-1 alpha and conservation of potential regulatory sequences with a human
  Grove M., Lowe S., Graham G., Pragnell I., Plumb M.; "Sequence of the murine haemopoletic stem cell inhibitor/macrophage
   Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermsen K., Luedke C., Gallegos C., Coit D., Merryweather J., Cerami A.;
"Cloning and characterization of a cDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.";
J. Exp. Med. 167:1939-1944(1988).
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
  Davatelis G., Tekamp-Olson P., Wolpe S.D., Hermsen K., Luedke C., Gallegos C., Coit D., Merryweather J., Cerami A.;
J. Exp. Med. 170:2189-2189(1989).
  Brown K.D., Zurawski S.M., Mosmann T.R., Zurawski G.;
"A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
J. Immunol. 142:679-687(1989).
   3
  MEDLINE-91237116; PubMed-2033269;
Widmer U., Yang Z., van Deventer S., Manogue K.R., Sherry B.,
             Length 92;
  Kwon B.S., Welssman S.M.;
"cDNA sequences of two inducible T-cell genes.";
Proc. Natl. Acad. Sci. U.S.A. 86:1963-1967(1989).
          38.5%; Score 146; DB 1;
42.4%; Pred. No. 2.3e-11;
iive 12; Mismatches 24,
   inflammatory protein 1 alpha gene.";
Nucleic Acids Res. 18:5561-5561(1990)
  SEQUENCE FROM N.A.
MEDLINE-89093958; Pubmed-2521353;
   MEDLINE-91016858; PubMed-2216738;
  MEDLINE-89184547; PubMed-2784565;
   MEDLINE-88258380; PubMed-3290382;
Query Match
Best Local Similarity 42.4%
Matches 28; Conservative
  Mus musculus (Mouse).
  SEQUENCE FROM N.A.
  62 MILNKL 67
  84 EYINYL 89
   SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
   NCBI_TaxID-10090;
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7

83 EYITDL 88

RESULT 9

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   NEUTROPHILS.

BUGELLUIAR LOCATION: Secreted.

TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
   SEQUENCE FROM N.A. SEQUENCE FROM N.A. STRIN-BALAKCJ, DBA/2J, NOD/LTJ, SJL/J, and B10.S/J; TISSUE-Spleen; Ma R.Z., Teuscher C.; Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
  DB 1; Length 92;
   22; Indels
   SMALL INDUCIBLE CYTOKINE A3.
  8BFF2DE7C6DEDD38 CRC64;
   Chemotaxis; Inflammatory response; Signal
  F -> L (IN REF. 3).
V -> A (IN REF. 3).
  37.5%; Score 142; DB 1; 40.9%; Pred. No. 7.1e-11;
   BY SIMILARITY
BY SIMILARITY
   15; Mismatches
  PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
   MGD; MGI:98260; Scya3.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
   SEQUENCE OF 24-42.
MEDLINE-88154745; PubMed-3279154;
colog, LD78.";
Immunol. 146:4031-4040(1991).
   M 3061, AAA39707.1; -.
AF065940; AAC17506.1; -.
AF065941; AAC17507.1; -.
AF065941; AAC17508.1; -.
AF065942; AAC17509.1; -.
   23
92
57
73
22
62
10345 MW;
  EMBL; M23447; AAA40146.1; -.
   J04491; AAA40304.1; -.
   X53372; CAA37452.1; -.
   Conservative
   Pfam; PF00048; IL8; 1.
   SMART; SM00199; SCY;
   PIR; S04533; S04533.
PIR; S11685; S11685.
HSSP; P13236; 1HUM.
   Similarity
27; Conserv
  92 AA;
   Cytokine;
  CONFLICT
CONFLICT
SEQUENCE
   DISULFID
  Query Match
  Local
  SIGNAL
  EMBL;
EMBL;
  EMBL;
EMBL;
  EMBL;
  EMBL;
  EMBL;
  Best Loc
Matches
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   ij
            SY04_CHICK STANDARD, PRT; 90 AA. 090826; 0910C9; 01-NOV-1997 (Rel. 35, Created) 15-JUN-2002 (Rel. 41, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Small inducible cytokine A4 homolog precursor (Macrophage inflammatory
   TISSUE-Bone marrow;
MEDLINE-95369710; PubMed=7642115;
MEDLINE-95369710; SubMed=7642115;
Petrenko O., Ischenko I., Enrietto P.J.;
"Isolation of a cDMA encoding a novel chicken chemokine homologous to mammalian macrophage inflammatory protein-1 beta.";
Gene 160:305-306(1995).
  Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
   -:- SUBCELLULAR LOCATION: Secreted.
   Hughes S.M., Bumstead N.; "Mapping of the gene encoding the chicken homologue of the mammalian
  Petrenko O., Enrietto P.J.;
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
  Gaps
   SMALL INDUCIBLE CYTOKINE A4 HOMOLOG.
   ij
   37.3%; Score 141.5; DB 1; Length 90; ilarity 37.9%; Pred. No. 8e-11; Conservative 15; Mismatches 25; Indels
   Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
  M -> L (IN REF. 1).
50AF9679A267408F CRC64;
   BY SIMILARITY.
BY SIMILARITY.
   BY SIMILARITY
   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. Cytokine; Chemotaxis; Signal.
   -! - SUBUNIT: HOMODIMER (BY SIMILARITY).
  HSSP; P13236; 1HUM.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
   EMBL; L34553; AAA48747.1; -. EMBL; AJ243034; CAB45103.1;
  9987 MW;
   SEQUENCE OF 14-90 FROM N.A.
   protein 1-beta homolog).
   C-C) (CHEMOKINE CC).
  Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
  (BY SIMILARITY)
  Query Match
Best Local Similarity
Matches 25; Conserv
   SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
  90 AA;
  NCBI_TaxID=9031;
   chemokine SCYA4.
   DISULFID
   DISULFID
  SEQUENCE
   SIGNAL
SY04_CHICK
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2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61

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62 MILNKL 67

8 8

us-09-509-165a-32.rsp

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STANDARD;
   83 EYINSL 88
  SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
  factors.
  NCBI_TaxID=9606;
   SY03_HUMAN
   expression.
  secreted
   SY03_HUMAN
     g
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   61
23 PVGSDPPTS-CCFTYISRQLPFSFVADYYETNSQCPHAGVVFITRKGREVCANPENDWVQ 81
   82
  ASANO K., Nakamura M., Oguma T., Fukunaga K., Ishizaka A.,
Yamaguchi K., Kanazawa M.;
Yamaguchi K., Kanazawa M.;
Submitted (APR-1997) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOATTRACTAMT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMORINE CC).
   2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK
  01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES
   Cavia porcellus (Guinea pig).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Hystricognathi, Caviidae, Cavia.
   ;
;
   EMBL; AB002662; BAA19604.; -
HSSP; P13501; 1RTN.
InterPro; IPR0010817; CC_chemkine_sml.
InterPro; IPR0010811; Chemokine_ILB.
Pfam; PF00048; ILB: 1
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYTOKINE; Chemotaxis; T-cell; Signal; Inflammatory response.
   36.9%; Score 140; DB 1; Length 91; 37.9%; Pred. No. 1.2e-10;
  SMALL INDUCIBLE CYTOKINE A5
   Indels
   Allet B.,
   STRAIN-Dunkin-Hartley;
Campbell E.M., Proudfoot A.E.I., Yoshimura T., Allet B.,
Wells T.N.C., White A.M., Westwick J., Watson M.L.;
Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
   7F6A31B751237DB9 CRC64;
  91 AA.
   Mismatches
   BY SIMILARITY
BY SIMILARITY
  POTENTIAL.
   14;
  SY05_CAVPO STANDARD; F P97272; 009976; 01-NOV-1997 (Rel. 35, Created) 01-NOV-1997 (Rel. 35, Last sequi 15-JUN-2002 (Rel. 41, Last anno
   91 AA; 10088 MW;
  EMBL; U77037; AAC53293.1;
   25; Conservative
  protein) (SIS-delta).
  SEQUENCE FROM N.A.
                                  62 MILNKL 67
  82 DYMNKM 87
   Local Similarity
  62 MILNKL 67
   SEQUENCE FROM N.A.
   NCBI_TaxID-10141;
  TISSUE-Lung;
  25
  DISULFID
   SEQUENCE
   Query Match
  SIGNAL
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Hunter M.G., Bawden L., Brotherton D., Craig S., Cribbes S., Czaplewski L.G., Dexter T.M., Drummond A.H., Gearing A.H., Heyworth C.M., Lord B.I., Mccourt M., Varley P.G., Wood L.M., Edwards R.M., Lewis P.J.; Balloul0: an active variant of human macrophage inflammatory protein-I alpha with improved pharmaceutical properties.";
  01-MAR.1989 (Rel. 10, Created)
01-MAR.1989 (Rel. 10, Last sequence update)
15-JUN-2002 (Rel. 4), Last annotation update)
15-JUN-2010 (Rel. 4), Last annotation update)
Small inducible cytokine A3 precursor (CCL3) (Macrophage inflammatory
protein 1-alpha) (MIP-1-alpha) (Tonsillar lymphocyte LD78 alpha
protein) (GO/GI switch regulatory protein 19-1) (GOS19-1 protein)
(SIS-beta) (PAT 464.1).
SCYA3 OR GOS19-1 OR MIP1A.
   "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."; Science 270:1811-1815(1995).
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
BINDS TO CCRI, CCRA AND CCR5. ONE OF THE MAJOR HIV-SUPPRESSIVE FACTORS PRODUCED BY CD8+ T CELLS. RECOMBINANT MIP-1-ALPHA INDUCES
   MEDLINE-91103879; PubMed-2271120;
Blum S., Forsdyke R.E., Forsdyke D.R.;
"Three human homologs of a murine gene encoding an inhibitor of stem
cell proliferation.";
DNA Cell Biol. 9:589-602(1990).
  Zipfel P.F., Balke J., Irving S.G., Kelly K., Slebenlist U.;
"Mitogenic activation of human T cells induces two closely related
genes which share structural similarities with a new family of
   Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
  MEDLINE-96106406; PubMed-8525373;
Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C.,
   SEQUENCE FROM N.A.
MEDLINE-86223879; PubMed-3086300;
Obaru K., Fukuda M., Maeda S., Shimada K.;
"A cDNA clone used to study man inducible in human tonsillar
   Nakao M., Nomiyama H., Shimada K.; . "Structures of human genes coding for cytokine LD78 and their
  Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
  SEQUENCE OF 24-92, AND MUTAGENESIS OF ASP-49.
Æ
   SEQUENCE OF 27-40 AND 71-83, AND FUNCTION.
82
   Mol. Cell. Biol. 10:3646-3658(1990).
PRT;
  lymphocytes by a tumor promoter.";
J. Biochem. 99:885-894(1986).
  SEQUENCE FROM N.A.
MEDLINE-89140347; Pubmed-2521882;
  MEDLINE-90287155; PubMed-1694014;
   MEDLINE-96127782; PubMed-8541527;
   Immunol. 142:1582-1590(1989).
   Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
   SEQUENCE OF 23-92 FROM N.A.
  Homo sapiens (Human)
                                DDT TO DD TO
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Matches 26,
  DISULFID
  SEQUENCE
   DISULFID
   VARIANT
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   ö
   10 SVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLIFRDKEICADPRVPWVKMILNKL 67
   SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
A DOSE-DEPENDENT INHIBITION OF DIFFERENT STRAINS OF HIV-1, HIV-2, BUDS SIMIAN IMMUNODEFICIENCY VIRUS (SIV).
SUBCELLULAR LOCATION: Secreted.
INDUCTION: BY TPA OR PHA (TPA = 12-0-TETRADECANOYL PHORBOL-13
ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
   Gaps
  (Monocyte chemotactic
  MEDIINE-97079149; PubMed-8920881; Jad G.O., Gonzalo J.A., Lloyd C., Kremer L., Lu L., Martinez A.C., Wershil B.K., Gutlerrez-Ramos J.C.; Distinct expression and function of the novel mouse chemokine
  Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
   ö
  Length 92;
  BY SIMILARITY.

BY SIMILARITY.

D->A: IN BB-10010; IMPROVED
   23; Indels
  SMALL INDUCIBLE CYTOKINE A3
  PHARMACEUTICAL PROPERTIES. 517865D5D6776CA8 CRC64;
   Pfam; PF00048; IL8; 1.
SWART; SM00199; SCY; 1.
PROSITE; PS00472; SWALL_CYTOKINES_CC; 1.
CYtokine; Chemotaxis; Inflammatory response; Signal.
  SY12_MOUSE STANDARD; PRT; 104 AA. 062401; 090YD6; 01.NOV-1997 (Rel. 35, Last sequence update) 15-NOV-1997 (Rel. 35, Last sequence update) 15-NOV-2002 (Rel. 41, Last annotation update) Small inducible cytokine Al2 precursor (CCL12) protein 5) (MCP-1 related chemokine).
  36.9%; Score 140; DB 1; 37.9%; Pred. No. 1.3e-10;
   C-C) (CHEMOKINE CC). STRONG, TO SCYABLI.
   13; Mismatches
   MIM; 182283; -.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
  ", M23452; AAA5316.1; -.
", M25315; AAA57255.1; -.
", X03754; CAA27388.1; -.
", X04018; CAA27643.1; ALT_SEQ.
", M23178; AAA35958.1; -.
", D90144; BAA14172.1; -.
   92 AA; 10085 MW;
   EMBL; D00044; BAA00029.1; -.
  AF043339; AAC03539.1;
  Genew; HGNC:10627; SCYA3.
   Conservative
   23
92
57
73
49
  PIR; A24198; A24198.
PIR; A30574; A30574.
HSSP; P13236; IHUM.
   Local Similarity
es 22; Conserv
   SEQUENCE FROM N.A.
  NCBI_TaxID=10090;
   SCYA12 OR MCP5
   SEQUENCE
  DISULFID
  Query Match
   DISULFID
   IGNAL
   EMBL;
EMBL;
  EMBL;
   EMBL;
  EMBL;
  SY12_MOUSE
   Matches
  RESULT 12
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  69
  91
   Sarafi M.N., Garcia-Zepeda E.A., McLean J.A., Charo I.F., Luster A.D.; "Murine monocyte chemoattractant protein (MCP)-5: a novel CC chemokine that is a structural and functional homologue of human
   "Sequence polymorphisms in the chemokines Scyal (TCA-3), Scya2 (monocyte chemoattractant protein (MCP)-1), and Scyal2 (MCP-5) are candidates for eae7, a locus controlling susceptibility to monophasic remitting/nonrelapsing experimental allergic encephalomyelitis."; J. Immunol. 163:2262-226(1999).
   12 CCRDYVRYRLPLRVVKEY-FYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKLSQ
   Gaps
   STRAIN=B10.S/J, BALB/c, DBA/2J, NOD/LLJ, and SJL/J; TISSUE-Spleen; BDLINES-93370037; PubMed-10438970; Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W., Blankenhorn E.P.;
  QTFILEPSCLG -> RT (IN STRAIN SJL/J).
8D102F4FF4CC3DBF CRC64;
ocyte chemotactic protein-5 in lung allergic inflammation.";
Exp. Med. 184:1939-1951(1996).
  35.8%; Score 135.5; DB 1; Length 104; 44.1%; Pred. No. 5.2e-10;
  SMALL INDUCIBLE CYTOKINE A12.
BY SIMILARITY.
BY SIMILARITY.
   Pfam; PF00048; ILB; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYtokine; Chemotaxis; Signal; Inflammatory response.
   .2e-10;
tes 22;
  Pred. No. 5.26; Mismatches
  BY SIMILARITY
   MGD; MGI:100824; Scyal2.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
   MEDLINE=97149438; PubMed=8996246;
  EMBL, U66670; AAB49424.1, -
EMBL, AF065934; AAF15384.1; -
EMBL, AF065935; AAF15385.1; -
EMBL, AF065936; AAF15386.1; -
EMBL, AF065937; AAF15387.1; -
   10;
  J. Exp. Med. 185:99-109(1997).
  11659 MW;
   EMBL; U50712; AAB50053.1; -.
   44.18;
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  104 AA;
  HSSP; P13500; 1DOL.
  Similarity
   SEQUENCE FROM N.A.
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   61
  82
   SY15_HUMAN STANDARD; PRT; 113 AA.
01665; Q9DM74;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A15 precursor (CCL15) (Macrophage inflammatory protein 5) (MIP-5) (Chemokine CC-2) (HCC-2) (MIP-
   Aust G., Thamm B., Rost A.K.;
"Cloning of Bos taurus RANTES mRNA.";
Submitted (MAR-1999) to the EmBL/GenBank/DDBJ databases.
-!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
   2 PYGANMEDSVCCRDYVRYREPRAVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK
                               30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
15-MAY-2002 (Rel. 41, Last annotation update)
5Mall inducible cytokine A5 precursor (CCL5) (T-cell specific RANTES SCRA5.
  Gaps
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea.
  5;
   Pfam; PF00048; ILB; 1. SMART; SM00199; SCY; 1. PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. CYtokine; Chemotaxis; T-cell; Signal; Inflammatory response.
  ; Score 135; DB 1; Length 91;
; Pred. No. 5.2e-10;
13; Mismatches 26; Indels
   SMALL INDUCIBLE CYTOKINE A5.
BY SIMILARITY.
660DD38E015B0735 CRC64;
                              Æ.
                              91
  POTENTIAL.
  HSSP; P13501; IRTN.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
  EMBL; AJ007043; CAA07430.1; -.
  91 AA; 10073 MW;
   35.6%;
Similarity 37.9%;
25; Conservative 1
   Bovidae; Bovinae; Bos
NCBI_TaxID=9913;
  Bos taurus (Bovine)
   Local Similarity
  62 MILNKL 67
   EYINAL 88
  SEQUENCE FROM N.A.
   TISSUE-Intestine;
                           SY05_BOVIN
   DISULFID
  DISULFID
  Query Match
   SIGNAL
  SY15_HUMAN
   Matches
        RESULT
  Best
   RESULT
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Nomiyama H., Fukuda S., Iio M., Tanase S., Miura R., Yoshie O.; "Organization of the chemokine gene cluster on human chromosome 17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, LEC, and
   MEDLINE=9822667; PubMed=9558365;
Youn B.-S., Zhang S.M., Broxmeyer H.E., Cooper S., Antol K.,
Youn B.-S., Zhang S.M., Broxmeyer H.E., Cooper S., Antol K.,
Renaser M. Jr., Kwon B.S.,
"Characterization of CKbeta8 and CKbeta8-1: two alternatively spliced forms of human beta-chemokine, chemoattractants for neutrophils, monocytes, and lymphocytes, and potent agonists at CC chemokine
  SEQUENCE FROM N.A.
Kwon B.S., Youn B.-S.;
"Isolation and characterization of a human chemokine cDNA, hmrp-2b.";
   Blood 91:3118-3126(1998).
--- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS T CELLS AND MONOCYTES, BUT NOT NEUTROPHILS, EOSINOPHILS, OR B CELLS. ACTS MAINLY VIA CC CHEMOKINE RECEPTOR CCR1. ALSO BINDS TO CCR3.
  4
  -!- TISSUE SPECIFICITY: MOST ABUNDANT IN HEART, SKELETAL MUSCLE AND.
   MEDLINE=98208236; PubMed=9548457; Youn B.-S., Zhang S.M., Lee E.K., Park D.H., Broxmeyer H.E., Youn B.-S., Zhang S.M., Lee E.K., Fark D.H., Broxmeyer H.E., Murphy P.M., Locati M., Pease J.E., Kim K.K., Antol K., Kwon B.S.; Molecular cloning of leukotactin-1: a novel human beta-chemokine, chemostractant for neutrophils, monocytes, and lymphocytes, and a potent agonist at CC chemokine receptors 1 and 3."; Immunol. 159:5201-5205(1997).
  Pardigol A., Forssmann U., Zucht H.-D., Loetscher P.,
Schulz-Knappe P., Baggiolini M., Forssmann W.-G., Maegert H.-J.;
"HCC-2, a human chemokine: gene structure, expression pattern, and
  Wang W., Bacon K.B., Oldham E.R., Schall T.J.; Molecular cloning and functional characterization of human MIP-1 delta, a new C-C chemokine related to mouse CCF-18 and C10."; J. Clin. Immunol. 18:14-222(1998).
  Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
   Coulin F., Power C.A., Alouani S., Peltsch M.C., Schroeder J.-M., Moshizuki M., Clark-Lewis I., Wells T.N.C.;
Submitted (JAN-1997) to the SWISS-PROT data bank.
   DISCUSSION OF SEQUENCE.
MEDLINE-97275308; Pubmed-9129202;
Wells T.N.C., Peitsch M.C.;
"The chemokine information source: identification and characterization of novel chemokines using the WorldWideWeb and
   Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases
  Proc. Natl. Acad. Sci. U.S.A. 95:6308-6313(1998)
  Interferon Cytokine Res. 19:227-234(1999).
1 delta) (Leukotactin-1) (LKN-1) (Mrp-2b) SCYA15 OR MIP5 OR NCC3.
  SEQUENÇE FROM N.A., AND CHARACTERIZATION
   expressed sequence tag databases.";
J. Leukoc. Biol. 61:545-550(1997).
   SEQUENCE FROM N.A.
MEDLINE-99228475; Pubmed-10213461;
  -!- SUBCELLULAR LOCATION: Secreted.
   TISSUE-Spleen;
MEDLINE-98287677; PubMed-9624581;
   TISSUE-Liver;
MEDLINE-98263352; PubMed-9600961;
   Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
   SEQUENCE OF 12-113 FROM N.A.
  Homo sapiens (Human)
   biological activity.
  TISSUE SPECIFICITY.
  SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
   SEQUENCE FROM
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                     BONE MARROW. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
  Gaps
  12 CCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 67
   01-AUG-1990 (Rel. 15, Created)
01-AUG-1990 (Rel. 15, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
Small inducible cytokine A3 like 1 precursor (Tonsillar lymphocyte
LD78 beta protein) (G0/G1 switch regulatory protein 19-2) (G0S19-2
protein) (PAT 464.2).
  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
  Irving S.G., Zipfel P.F., Balke J., McBride O.W., Morton C.C., Burd P.R., Slebenlist U., Kelly K.; "Two inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q."; Nucleic Acids Res. 18:3261-3270(1990).
  ADRENAL GLAND. LOWER LEVELS IN PLACENTA, LIVER, PANCREAS AND
   ;
0
   Cytokine; Chemotaxis; Heparin-binding; Signal; Polymorphism. SIGNAL 1 2 113 SMALL INDUCIBLE CYTOKINE A15. DISULFID 53 77 7 7 7 7 113 SMALL INDUCIBLE CYTOKINE A15. DISULFID 54 93 104 I -> T.
  Length 113;
  Query Match 35.4%; Score 134; DB 1; Length 11 Best Local Similarity 39.3%; Pred. No. 8.7e-10; Matches 22; Conservative 12; Mismatches 22; Indels
  14 V -> I (IN REF. 5).
12248 MW; OBAOFCE7BBA30A04 CRC64;
   /FTId-VAR_011640.
   Ą
  InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL18; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
  MEDLINE-90287702; PubMed-1972563;
   MEDLINE-91103879; PubMed-2271120;
  EMBL; Z70293; CAA94308.1; -.
EMBL; Z70292; CAA94306.1; -.
EMBL; AF031587; AR894617.1; -.
EMBL; AF088219; AAC63328.1; -.
  EMBL; U58914; AAD10847.1; -. HSSP; P55773; 1G91. Genew; HGNC:10613; SCYA15. MIM; 601393; -.
   C-C) (CHEMOKINE CC).
   STANDARD;
  Homo sapiens (Human)
   113 AA;
  SCYA311 OR G0S19-2
  SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
  NCBI_TaxID=9606;
   TISSUE-Blood
  SY3L_HUMAN
P16619;
   SEQUENCE
  CONFLICT
  SY3L_HUMAN
   RESULT 15
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   ö
  32 TACCESYTSRQIPQNFIADYFETSSQCSKPSVIFLTRRGRQVCADPSEEWVQKYVSDL 89
   10 SVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 67
   Strausberg R.;
Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
-!- SUBCELDULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC). STRONG, TO SCYA3.
                           Three human homologs of a murine gene encoding an inhibitor of stem
  [3] SEQUENCE FROM N.A. MEDLINE-90287155; Pubmed-1694014; NambLine-90287155; Pubmed-1694014; Nakao M., Nomiyama H., Shimada K.; Natuctures of human genes coding for cytokine LD78 and their "Structures of human genes coding
   SMALL INDUCIBLE CYTOKINE A3 LIKE
  35.1%; Score 133; DB 1; Length 93; 36.2%; Pred. No. 9.4e-10; tive 13; Mismatches 24; Indels
  BY SIMILARITY.
BY SIMILARITY.
A7A79E774006D61E CRC64;
   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
Forsdyke R.E., Forsdyke D.R.;
   MIM; 601395; -.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Pfam; Pf00048; ILB; 1.
SWART; SM00199; SCY; 1.
  expression.";
Mol. Cell. Biol. 10:3646-3658(1990).
   EMBL; X52149; CAA36397.1; -.
EMBL; M24110; AAA35859.1; -.
EMBL; D90145; BAA14173.1; -.
EMBL; BC027888; AA417888.1; -.
PIR; B30908; B30908.
PIR; B30412; B30412.
PIR; B35673; B35673.
PIR; S10157; S10157.
  1 23 SN
24 93 SN
34 58 BN
35 74 BN
93 AA; 10161 MW; P
   cell proliferation.";
DNA Cell Biol. 9:589-602(1990)
  TISSUE-Pancreas, and Spleen;
   HSSP; P13236; 1HUM.
Genew; HGNC:10628; SCYA3L1.
   21; Conservative
   Cytokine; Chemotaxis;
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  [4]
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July 28, 2003, 03:58:28; Search time 12.7563 Seconds (without alignments) 1114.528 Million cell updates/sec
  US-09-509-165A-32
379
I GPYGANMEDSVCCRDYVRYR.....EICADPRVPWVKMILNKLSQ 69
   671580
GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
   Total number of hits satisfying chosen parameters:
   671580 segs, 206047115 residues
   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
   OM protein - protein search, using sw model
  BLOSUM62
Gapop 10.0 , Gapext 0.5
  Minimum DB seq length: 0
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: sp_bacteria:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

sp\_vertebrate:\*
sp\_unclassified:\*

sp\_rodent:\* sp\_virus:\* sp\_plant:\*

sp\_rvirus:\*
sp\_bacteriap:\*
sp\_archeap:\*

sp\_invertebrate:\*
sp\_mammal:\*

sp\_fung1:\* sp\_human:\* sp\_organelle:\*

sp\_phage:\* sb\_mhc:\*

# SUMMARIES

|               |       | •              |                          |    |        |                    |
|---------------|-------|----------------|--------------------------|----|--------|--------------------|
|               |       | æ              |                          |    |        |                    |
| Result<br>No. | Score | Query<br>Match | Query<br>Match Length DB | DB | ID     | Description        |
| 1             | 264   | 69.7           | 92                       | 11 | 090ZU2 | O9dzu2 mus musculu |
| 7             | 260   | 68.6           | 81                       | 11 | 090zu1 | O9dzul rattus norv |
| m             | 260   | 68.6           | 92                       | 11 | Q912H5 | 091zh5 rattus norv |
| 4             | 158   | 41.7           | 91                       | 13 | 080657 | O8qq57 qallus qall |
| S             | 156   | 41.2           | 95                       | 12 | 098158 | 098158 kaposi's sa |
| <b>.</b>      | 150   | 39.6           | 92                       | 11 | 091265 | 091z65 sigmodon hi |
| 7             | 146.5 | 38.7           | 92                       | 11 | Q912L0 | 091z10 sigmodon hi |
| œ             | 143   | 37.7           | 92                       | 9  | 085040 | 08sq40 felis silve |
| ō             | 142.5 | 37.6           | 90                       | 13 | 09PWA6 | O9pwa6 gallus gall |
| 10            | 142   | 37.5           | 89                       | 13 | Q918E0 | 0918e0 gallus gall |
| 11            | 141.5 | 37.3           | 90                       | 13 | Q910C9 | 0910c9 gallus gall |
| 12            | 137.5 | 36.3           | . 93                     | 9  | 08SQA6 | O8sga6 bos taurus  |
| 13            | 136.5 | 36.0           | 91                       | 11 | 091211 | 091z11 sigmodon hi |
| 14            | 133   | 35.1           | 93                       | 4  | 096168 | 096168 homo sapien |
| 15            | 128   | 33.8           | 80                       | 4  | 014745 | 014745 homo sapien |
| 16            | 116.5 | 30.7           | 79                       | 4  | 095689 | 095689 homo sapten |

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Query Match 69.7%; Score 264; DB 11; Length 92; Best Local Similarity 64.7%; Pred. No. 5.4e-27; Matches 44; Conservative 16; Mismatches 8; Indels

61 KMILNKLS 68

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| 094056 gallus gall 094026 mus musculu 0950403 mus musculu 0950407 mus musculu 0950701 canis famil 096830 mus musculu 092292 cricetulus 092292 cricetulus 091294 mus musculu 091294 equus cabal 091446 equus cabal 091441 equus cabal 091494 mus musculu 091811 macaca mula 091491 bos taurus 09181 qquus cabal 091491 equus cabal 091491 equus cabal 091491 equus cabal 091491 equus cabal 091891 mus musculu 090184 mus musculu 090184 mus musculu 090184 cavia porce 091493 equus cabal | 091044 mus musculu 091044 mus musculu 09pt07 oncorhynchu 09pt06 oncorhynchu 09pt05 oncorhynchu 09pt33 salmo trutt 09w691 oncorhynchu 095690 homo sapien | AA.<br>. update)<br>.on`update)                                                                         | Craniata; Vertebrata; Euteleostomi;<br>Sciurognathi; Muridae; Murinae; Mus.                    | ., Epp A., Romagnani S.,<br>ized to thymic medullary<br>r CD3+, CD4+, CD8+/-                                                            | _IL8.<br>17FE31A87F352E63 CRC64;                                                                                   |
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| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1744<br>PT04<br>PT07<br>PT06<br>PT05<br>PTS3<br>W691<br>690                                                                                             | 92<br>)<br>quence<br>notati                                                                             | liata; Vo<br>irognath                                                                          | C.J.,<br>ocaliz<br>c for                                                                                                                | 3.<br>E31A87F3                                                                                                     |
| 080G56<br>09WUZ6<br>09WUZ6<br>09ERC0<br>095WD3<br>095WD3<br>090XD7<br>090XD3<br>090XD4<br>090TD4<br>090TD4<br>090TD4<br>090TD4<br>090TD4<br>090TD4<br>090TD4                                                                                                                                                                                                                                                                                                                              | 600000000000000000000000000000000000000                                                                                                                 | PRT<br>Creat<br>Last<br>Last                                                                            |                                                                                                | apo)<br>is<br>taci                                                                                                                      | ine ;                                                                                                              |
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| 22 22 22 22 22 22 22 22 22 22 22 22 22                                                                                                                                                                                                                                                                                                                                                                                                                                                    | imruuuuuo                                                                                                                                               | PRELIMINARY (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.                                                         | (Mouse).<br>Hetazoa; C<br>Itheria; R<br>(0090;                                                 | NA N.A.<br>C;<br>, Romagnani P<br>derived chemo                                                                                         | ;<br>1999).<br>76, AAD55;<br>1CM9.<br>6779; SCY<br>ROO1811;<br>8; IL8; 1<br>8; IL8; 1<br>99; SCY;<br>2 AA; 1C      |
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1 GPYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWV 60
   25 PFGA--DITVCCFNYSVRKLPQNHVKDYFYTSSKCPQAAVVFITRKGRQVCANPDARWVK 82
  25 GPYGANVEDSICCQDXIRHPLPPRFVKEFYWTSKSCRKPGVVLITIKNRDICADPRMLWW 84
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK
   Eukaryota; Metazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
   Kaposi's sarcoma-associated herpesvirus (KSHV) (Human herpesvirus 8). Viruses; dsDNA viruses, no RNA stage; Herpesviridae; Gammaherpesvirinae; Rhadinovirus.
  SEQUENCE FROM N.A.
MEDLINE-97121480; Pubmed-8962146;
Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D.,
Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.;
  MEDLINE-21655115; PubMed-11797102; Munstead N.; Maynes A., O'Regan M., Bumstead N.; Haynes A., O'Regan M., Bumstead N.; Indentification, mapling, and phylogenetic analysis of three novel chicken CC chemokines."; Immunogenetics 53:674-683(2001).

EMBL; AY307859; AAR4312.1; - SEQUENCE 91 AA; 10154 MW; 744A64BB229194EF CRC64;
   MEDLINE-97094384; PubMed-8939871;
Moore P.S., Bashoff C., Weiss R.A., Chang Y.;
"Molecular mimicry of human cytokine and cytokine response pathway
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Last annotation update)
  Last annotation update)
   Last sequence update)
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63.2%; Pred. No. 1.8e-26;
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   Science 274:1739-1744(1996).
   01-JUN-2002 (TrEMBLrel. 2:
01-JUN-2002 (TrEMBLrel. 2:
01-JUN-2002 (TrEMBLrel. 2:
Chemokine ah294.
Gallus gallus (Chicken).
   Conservative
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   PRELIMINARY;
  KMILNKLS 68
  85 KKILHKLA 92
  Ouery Match
Best Local Similarity
Matches 43; Conserv
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  62 MILNKL 67
  83 EYINFL 88
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   NCBI_TaxID=9031;
  098158; 012569
  genes by KSHV.
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   Q8QG57
  Gallus
   098158
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   14 GPYGANYEDSICCQDYIRHPLPPRFYKEFYWTSKSCRKPGVVLITIKNRDICADPRMLWV 73
   Garcia G.E., Chen S., Xia Y., Harrison J., Wilson C.B., Johnson R.J., Bacon K.B., Feng L.;

"Mononuclear cell-infiltrate inhibition by blocking macrophage-derived chemokine results in attenuation of developing crescentic submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.

EMBL, AF432871; AAL30397.1;

InterPro: IPR001811; Chemokine_ILB.

Pfam: PF000448; ILB: 1.

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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
  ;
0
   "Macrophage derived chemokine is localized to thymic medullary epithelial cells and is chemotactic for CD3+, CD4+, CD8+/-
  STRAIN-SPRAGUE-DAWLEY; TISSUE-THYMUS;
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   01-MAY-2000 (TrEMBLrel. 13, Last sequence update) 01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
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| Similarity 63.2%;
| 43; Conservative 1
   (TrEMBLrel. 13, (TrEMBLrel. 13,
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   PRELIMINARY;
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KKLLHKLS 92
  61 KMILNKLS 68
  | ||:||:
74 KKILHKLA 81
  Local Similarity
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   SEQUENCE FROM N.A.
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   01-MAY-2000
   thymocytes."
   STRAIN-LEW;
  Gray P.W.;
   SEQUENCE
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   Query Match
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**0912H5** 

RESULT **0912H5** 

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EMBL; AY059407; AAL26704.1; -.
Interpro; IPR000827; CC_chemkine_sml.
Interpro; IPR001811; Chemokine_ILB.
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   Best Local
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  088040
  0912L0
   Matches
   Matches
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  MEDLINE-97296220; PubMed-9151804;
Neipel F., Albrecht J.C., Fleckenstein B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its pathogenicity?";
J. virol. 71:4187-4192(1997).
  Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena D., Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
  ο,
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   SEQUENCE FROM N.A.
Nicholas J., Ruvolo V.R., Burns W.H., Sandford G., Wan X., Ciufo D., Hendrickson S., Guo H.G., Hayward G.S., Reitz M.S.; Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
  12 CCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 67
   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
  Russo J.J., Bohenzky R.A., Chien M.C., Chen J., Yan M., Maddalena Parry J.P., Peruzzi D., Edelman I.S., Chang Y., Moore P.S.; Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
  "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
   SEQUENCE FROM N.A.
Blanco J.C., Pletneva L.M., Prince G.A.;
"Sigmodon hispidus cytokines, chemokines and interferons.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
  14; Indels
  Ren S., Lin S.-F., Miller G.;
Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases.
EMBL; U75698, AAC57095.1; -.
EMBL; U74585; AAB61704.1; -.
  Sun R., Lin S.-F., Miller G.;
Submitted (SEP-1996) to the EMBL/GenBank/DDBJ databases
  Hypothetical protein.
SEQUENCE 95 AA; 10485 MW; 34B9AFC4987FC485 CRC64;
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Last annotation update)
                          coc. Natl. Acad. Sci. U.S.A. 93:14862-14867(1996)
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Pred. No: 8.4e-13;
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  Mismatches
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01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence
01-WAR-2002 (TrEMBLrel. 20, Last annotati
Macrophage inflammatory protein-1 alpha.
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  InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SMART; SM00199; SCY; 1.
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  SEQUENCE FROM N.A.
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              HHV8).
  091265
  Matches
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  61
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
   25 PYGAD-TPTFCCFSYGR-QIPRKFIADYFQTSSLCSEPGIIFLTKRNRHVCADPKETWVQ 82
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLIFRDKEICADPRVPWVK
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  Gaps
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
  Felis silvestris catus (Cat).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Carnivora, Fissipedia, Felidae, Felis.
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Blanco J.C., Pletneva L.M., Prince G.A.;
Blanco J.C., Pletneva L.M., Prince G.A.;
Sigmodon hispidus cytokines, chemokines and interferons.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AF421992; AAL16933.1;
InterPro; IPR000837; CC. Chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Prostro; PR00448; IL8; 1.
PROSTRO; PS00472; SMALL_CYTOKINES, CC. UNKNOWN_1.
SEQUENCE 92 AA; 10195 MW; A34FDE21E6FA9C2E CRC64;
   39.6%; Score 150; DB 11; Length 92;
  Indels
  Indels
Pfam; PF00048; IL8; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 92 AA; 10334 MW; CF9AAB3D94DCAF79 CRC64;
   01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DAR-2002 (TrEMBLrel. 20, Last annotation update)
Macrophage inflammatory protein 1 beta.
MIP-18ETA.
   Created)
Last sequence update)
Last annotation update)
  Score 130,
Pred. No. 5e-12;
   Pred. No. 1.4e-11;
   92 AA
   9; Mismatches
   92 AA
  15; Mismatches
   Sigmodon hispidus (Hispid cotton rat).
  PRT;
   01-JUN-2002 (TrEMBLrel. 21,
01-JUN-2002 (TrEMBLrel. 21,
01-JUN-2002 (TrEMBLrel. 21,
RANTES protein.
   40.98;
  43.98;
  27; Conservative
  29; Conservative
   PRELIMINARY;
  PRELIMINARY;
   Similarity
   83 EIITDL 88
   Query Match
Best Local Similarity
  84 EYVNDL 89
  62 MILNKL 67
   62 MILNKL 67
  NCBI_TaxID-42415;
  NCBI_TaxID=9685;
```

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2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
  23 PVGPDV--PTCCTTYITHKIPRNLIQRHYSTSTSCSKPAIIFITKKEREVCANPSDPWVQ 80
   2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
  23 PVGSDPPTS-CCFTYISRQLPFSFVADYYETNSQCPHAGVVFITRKGREVCANPENDWVQ 81
  SCYA4.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
Gallus.
   SEQUENCE FROM N.A.

Hughes S.M., Bumstead N.;

Hughes S.M., Bumstead N.;

Hughes S.M., Bumstead N.;

Hughes S.M., Bumstead N.;

Submitted (JUN-199) to the EMBL/GenBank/DDBJ databases.

Submitted (JUN-199) to the EMBL/GenBank/DDBJ databases.

EMBL, AJ243034, CAB45103.1.;

InterPro; IPR001811; Chemkine_sml.

InterPro; IPR001811; Chemkine_ILB.

Pfam; PF00048; LLB; 1.

PROSITE: PS00472; SMALL, CYTOKINES_CC; UNKNOWN_1.

SEQUENCE 90 AA; 9987 WW; SOAF9679AZ67408F CRC64;
  Query Match 37.3%; Score 141.5; DB 13; Length 90; Best Local Similarity 37.9%; Pred. No. 6.4e-11; Matches 25; Conservative 15; Mismatches 25; Indels 1
  37.5%; Score 142; DB 13; Length 89; 29.4%; Pred. No. 5.4e-11; Live 23; Mismatches 23; Indels
   POTENTIAL.
CHEMOKINE K203.
6FA2EA7A4950CA75 CRC64;
  01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Macrophage inflammatory protein 1-beta
  ., Weining K.C.;
                             MEDLINE-20170941; Pubmed-10704244; Sick C., Schneider K., Staehell P., We "Novel chicken CXC and CC chemokines." Cytokine 12:181-186(2000).

EMBL; Y18692; CAB70956.1; -. HSSP; P13236; IHUM.
  Q8SQA6 PRELIMINARY; PRT; Q8SQA6; CTEMBLrel. 21, Created)
   PRT;
  InterPro; IPR001811; Chemokine_IL8 Pfam; PF00048; IL8; 1. SMART; SM00199; SCY; 1.
   1 21
22 89
89 AA; 9896 MW;
  Best_Local Similarity 29.4 Matches 20; Conservative
   PRELIMINARY;
  81 RYLQSVKR 88
   62 MILNKL 67
   82 DYMNKM 87
   62 MILNKLSQ
   NCBI_TaxID=9031;
   SEQUENCE
   Query Match
   Signal.
  091009;
   Q910C9
   RESULT 12
Q8SQA6
ID Q8SQA
AC Q8SQA
DT 01-JUI
   RESULT 11
  091009
             q
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  g
   ò
   g
  ò
  a
  23 PVGSDPPTS-CCFTXISRQLPFSFVADYXETNSQCPHAGVVFITRKGREVCANPQNDWVQ 81
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
  25 PYAS--DITPCCFAYLSHPLPLTHLQEYFYTSSKCSMPAVVFVTRRKRQVCANPQKKWVR 82
  2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
   Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
  Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
   Gaps
   Hughes S.M., Bumstead N.; "Mapping of the gene encoding the chicken homologue of the mammalian chemokine SCYA4."; Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases. EMBL; AF16730; AAAD48772.1; -. HSSP; P13236; IHUM.
   Gaps
   1;
  37.6%; Score 142.5; DB 13; Length 90; 37.9%; Pred. No. 4.7e-11; Live 16; Mismatches 24; Indels 1
   Query Match 37.7%; Score 143; DB 6; Length 92; Best Local Similarity 41.7%; Pred. No. 4.1e-11; Matches 25; Conservative 14; Mismatches 19; Indels
  24; Indels
SEQUENCE FROM N.A.

Kimura T., Kano R., Hasegawa A.;

Kimura T., Kano R., Hasegawa A.;

"molecular cloning of feline RANTES gene.";

Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AB083479; BAB88940.1; -.

SEQUENCE 92 AA; 10167 MW; 2E6F087140BA3CE8 CRC64;
   InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Pfam; PF00048; IL8; 1.
SWART; SM00199; SCY; 1.
SROSTE; PS00472; SMALL_CYTOKINES_CC; 1.
SEQUENCE 90 AA; 9986 MW; 50AF9679A2675ICB CRC64;
   Last sequence update)
Last annotation update)
   01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Chemokine K203 precursor.
   90
   Created)
   01-MAY-2000 (TrEMBLrel. 13, 01-MAY-2000 (TrEMBLrel. 13, 01-MAR-2002 (TrEMBLrel. 20,
   Query Match 37.6%
Best Local Similarity 37.9%
Matches 25; Conservative
  PRELIMINARY;
  PRELIMINARY;
  SEQUENCE FROM N.A.
  62 MILNKL 67
   82 DYMNKM 87
  NCBI_TaxID=9031;
   NCBI_TaxID-9031;
[1]
   Chemokine.
   Query Match
  Q918E0
Q918E0;
   09PWA6
  RESULT 10
  RESULT 9
  0918E0
1D 099
AC 099
DT 011
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  O9PWA6
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Gaps

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93 AA.

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Query Match
Best Local S:
Matches 20;
   NON_TER
SEQUENCE
  10
   Signal.
NON_TER
                         Mip-la)
  SIGNAL
  RESULT 15
   Q14745
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   2 PYGANMEDSVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
   64
   6 NMEDSV-CCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMIL
  Gaps
   Sigmodon hispidus (Hispid cotton rat).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
                     Macrophage inflammatory protein-1 alpha.

Box taurus (Bovine).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
   ij
  ä
  DB 11; Length 91;
   DB 6; Length 93;
   Blanco J.C., Pletneva L.M., Prince G.A.; "Sigmodon hispidus cytckines, chemckines and interferons."; Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AF421991; All6932.1; -InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemckine_ILB.
Pfam; PF00408; ILB; IL.
PROSITE; PS00472; SMALL_CYTOKINES_CC; UNKNOWN_1.
SEQUENCE 91 AA; 10082 MW; DODGEARABE422FF CRC64;
   36.0%; Score 136.5; DB 11; Length 42.9%; Pred. No. 2.9e-10; Live 12; Mismatches 23; Indels
   Indels
  Werling D.;
"Role of chemokines in RSV infection.";
"Role of chemokines in the EMBL/GenBank/DDBJ databases.
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL: AY077840; ALT78060.1;
-1266BFBFCEE5E8E9 CRC64;
SEQUENCE 93 AA; 10118 MW; 1266BFBFCEE5E8E9 CRC64;
  01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update) 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
   36.3%; Score 137.5; DB 6; 36.4%; Pred. No. 2.2e-10; Live 16; Mismatches 25;
   (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
   91 AA.
  93 AA.
   PRT;
  PRT;
   Best Local Similarity 36.4%
Matches 24; Conservative
   Local Similarity 42.9 tes 27; Conservative
  PRELIMINARY;
  PRELIMINARY;
   Bovidae; Bovinae; Bos.
  SEQUENCE FROM N.A.
  62 MILNKL 67
   84 EYITDL 89
  SEQUENCE FROM N.A.
  RANTES chemokine.
  NCBI_TaxID=42415;
  NCBI_TaxID=9913;
   65 NKL 67
   NYL 88
  Q96168
Q96168;
01-DEC-2001
01-DEC-2001
  Query Match
  Query Match
  Sigmodon
  Q91ZL1
  Best Loca
Matches
  RESULT 14
Q96168
ID Q9616
AC Q9616
DT 01-DE
DT 01-DE
   RESULT 13
0912L1
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10 SVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVKMILNKL 67
   Gaps
  Gaps
   014745 PRELIMINARY; PRT; 80 AA.
014745 PTELIMINARY; PRT; 80 AA.
014745;
01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 20, Last sequence update)
01-NOV-1996 (TrEMBLrel. 20, Last annotation update)
101-MAR-2002 (TrEMBLrel. 20, Last annotation update)
101-NOR-1996 (Human).
102-103 (Human).
103 Editoria; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
103 Editoria; Eutheria; Primates; Catarrhini; Hominidae; Homo.
   Euteleostomi;
   SVCCRDYVRYRLPLRVVKEYFYTSDSCPRPGVVLLTFRDKEICADPRVPWVK 61
  TISSUE-BRAIN;
IShizuka K., Igata-Yi R., Naruse K., Nakashima H., Ohuchi K.,
Katsuragi S., Kin Y., Ohmoto Y., Nomiyama H., Ilo M., Miura R.,
Miyakawa T.;
Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases.
EMBL, D63786; BAA09855.1;
InterPro; IPR001817; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_IL8.
Ffam; PF00048; ILB; 1.
SMART; SM00199; SCY; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
  ;
  ö
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Similar to small inducible cytokine A3 (homologous to mouse
  ch 33.8%; Score 128; DB 4; Length 80; Similarity 38.5%; Pred. No. 3.4e-09; 20; Conservative 11; Mismatches 21; Indels
  Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
  35.1%; Score 133; DB 4; Length 93; 36.2%; Pred. No. 8.6e-10; ive 13; Mismatches 24; Indels
  Strausberg R.;
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, BC007783; AAH07783.1; -.
InterPro; IPR000827; CC_chemkine_sml.
InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
SEQUENCE 93 AA; 10144 MW; A7A78E374006D6IE CRC64;
  8B509EB15648E971 CRC64;
   POTENTIAL.
LD78 ALPHA BETA.
  Search completed: July 28, 2003, 04:02:52 Job time: 12.7563 secs
  8857 MW;
   Query Match
Best Local Similarity 36.2%
Matches 21; Conservative
   SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
   80 AA;
  NCBI_TaxID=9606;
  TISSUE-B-CELL;
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